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AMERICAN PRONUNCIATION

American Pronunciation

A TEXTBOOK OF PHONETICS FOR STUDENTS OF ENGLISH

By
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Eighth Edition, Revised

"A teacher of speech untrained in phonetics is as useless as a doctor untrained in anatomy."
—George Sampson, M.A.

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PREFACE

This book is designed primarily for a textbook on pronunciation. Its material is presented from the point of view of a teacher of college students who for some years has laid it before them with varying success, but at least with increasing hope and growing confidence in the value of the effort. Though in form it is adapted to pedagogical ends, in content it is believed to be scientifically trustworthy. If the scholar finds in it an annoying fulness of statement with somewhat of repetition, he is asked to remember that this is due to its aim.

The author has found the excellent books on phonetics that are based on British pronunciation unsuccessful in teaching American pronunciation, and believes that more American works on the subject are needed. College teachers of English are increasingly realizing that the teaching of pronunciation is inadequately provided for by the comparatively slight contact and scattered criticisms of speech in the classroom. The student needs some introduction to the whole subject as a science with its own set of principles that will guide him independently of the instructor. Accordingly the teaching of phonetics to undergraduates is on the increase, and it is hoped that this book will assist in that direction.

The book should also be useful to public-school teachers who desire to fit themselves more fully to guide their pupils in their use of speech. Not that they will wish to present the material in this form to their pupils, but that they can find here systematically treated virtually all the problems of pronunciation they are daily encountering, many of which are insoluble without a scientific approach to them. Textbooks of grammar and composition contain only scattered comments on pronunciation, and a good deal of their information is false or misleading.

The field of English as a subject for teaching has been revolutionized in the past twenty-five or more years by the great specialists in the different parts of the field in European and American universities. Yet the very names of these scholars are often unfamiliar to the great body of American schoolteachers and the intelligent public. It is one purpose of this book to make a little of this material more generally accessible.

The author has tried to avoid dogmatism with regard to preferable pronunciations. No attempt is made to set up or even to imply a standard of correctness based on the usage of any part of America. He believes that the state of cultivated pronunciation in America does not warrant the more prescriptive method used by Professor Daniel Jones and Mr. Walter Ripman with reference to standard pronunciation in England. Whether there is ever to be a single standard in America or not, the time is not yet ripe for it. This book is therefore primarily a science of pronunciation; and though the author believes that the art of good pronunciation can be best attained through the scientific approach, the art as such is here little emphasized. The main purpose of the work is to help the student to study the facts of pronunciation till he is somewhat conversant with phonetic principles. He will then be in a better position to consider questions of correctness. The author is aware that an attitude of great confidence as to correctness is likely to gain a quicker audience; but he prefers the slower way of helping to disseminate sound knowledge, with faith in the greater soundness of the culture that will result from it.

With this principle in mind, the author has based his observations on the cultivated pronunciation of his own locality—the Western Reserve of Ohio. It is his belief, however, that this is fairly representative of what will here be called the speech of the North, which is virtually uniform in its most noticeable features from New York State west, in the region north of a line

drawn west from Philadelphia. There is no intention of implying any preference for this speech over that of the East or the South. The main differences in the pronunciation of these different regions are pointed out, with the aim of making the book useful in different parts of the country.

The author is deeply indebted to the British phoneticians Sweet, Ripman, Jones, and Grant, to the Danish scholar Jespersen, and to the Americans Emerson, Krapp, and Grandgent (see Bibliography). It would be impossible to indicate all that he has learned from them which appears in this book; yet he has tried to take nothing, without acknowledgment, not common to students of phonetics, or that he has not thoroughly tested by his own observation. The personal debt is especially great to Professors O. F. Emerson of Western Reserve University and Charles H. Grandgent of Harvard University for guidance and encouragement, and to my colleague, Professor Lee Edwin Cannon, for assistance in reading proof and for valuable suggestions.

Hiram, Ohio, January 1, 1924.

PREFACE TO THE FOURTH EDITION

The gratifying reception of *American Pronunciation* indicates the rapidly increasing interest in the history and phonetics of American English, and a desire to put aside the still abundant quackery based on eighteenth century knowledge and twentieth century ignorance about matters of standards and correctness.

That Professor Krapp's term, General American, is abundantly warranted for the type of pronunciation chiefly described in this book is shown by even the most conservative estimates of the number speaking it in the United States and Canada (see section 5 below). Certain criticisms, however, make it necessary to affirm again that the author does not advocate this or any

one type as the sole standard for America. To help students escape from such a point of view was one of the objects of this book. The author admits no rivalry in his admiration of that clear, intelligent pronunciation of the best types of Southern and Northern British, of Scottish standard English, of Eastern, Southern, and General American, which is the best index of personality, that most interesting of all facts. But apparently this does not satisfy such critics. One must not even describe or speak respectfully of the traditional speech of ninety million people. Some of the astonishing specimens of neither fish nor flesh nor good red herring that greet the radio listener appear to be prophetic of what we may expect from a continued fostering of the naïve assumption that only one form of speech can be correct.

It is impossible to add the names of all those scholars to whom the author has become indebted for valuable criticisms and help since the publication of the first edition; but he cannot refrain from mentioning with gratitude Professors Samuel Moore, Hans Kurath, and Miles L. Hanley in America, and Professor Daniel Jones, Mr. A. Lloyd James, and Mr. Stephen Jones in England.

Hiram, Ohio, August 22, 1930.

PREFACE TO THE SIXTH EDITION

The present edition has been entirely rewritten. My experience in teaching both undergraduates and graduates has made it increasingly evident that even those students who have studied foreign language have little idea of the principles and processes of language. I have introduced considerable in the way of question and suggestion intended to awaken the interest of students in their mother tongue, its behavior and laws of development, particularly as these have a bearing on an intelligent attitude toward what constitutes good English speech.

The arrangement of material is somewhat shifted. The teacher is free to change the order of presentation or to omit what does not suit his purpose.

It is impossible to name all those scholars who have made this book possible. In addition to those named in former prefaces, I wish to express special obligations to Dr. Bernard Bloch, of the Linguistic Atlas of the United States and Canada, and to Professor William Cabell Greet of Barnard College, Columbia University, and editor of *American Speech* for valuable suggestions; to Mr. Martin Joos of the University of Wisconsin, for valuable suggestions and for making the Index; to Professor Miles L. Hanley of the University of Wisconsin for valuable suggestions and for reading proof; and to my daughter, Martha E. Kenyon, of the James Ford Rhodes High School, Cleveland, for making the drawings (except Figs. 8 and 9). I also desire to thank the G. and C. Merriam Co., publishers of Webster's *New International Dictionary*, for their kind permission to use certain material contributed to the *Second Edition* (1934).

Hiram College, April 9, 1935.

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INTRODUCTION

There are few subjects on which educated Americans are so ready to pass judgment and give advice on the basis of so little sound knowledge as the pronunciation of the English we use. Influenced by certain types of teaching in the schools, by the undiscriminating use of textbooks on grammar and rhetoric, by unintelligent use of the dictionary, by manuals of "correct English," each with its favorite (and different) shibboleth, and, it would seem, by anybody or anything that has an air of cocksureness about it, we accept rules of pronunciation as authoritative without inquiry into either the validity of the rules or the fitness of their authors to promulgate them.

Some of the rules are well founded, no doubt; but many of them are quite without foundation in the usage of past or present. Some of them are purely traditional, formulated a century or two ago on theoretical grounds by teachers and writers who had no adequate knowledge of the history or phonetics of English; and they have been reverently copied and taught by later writers and teachers without a knowledge of either their ultimate origin or their validity. Yet we not only accept many of these rules ourselves, but seek to impose them on others by criticizing their pronunciation when it differs from what we suppose correct.

A remarkable aspect of our readiness to criticize pronunciation is the fact, which becomes overwhelmingly obvious to even the beginner in phonetics, that we do not know what sounds we ourselves actually pronounce, until we have attained some elementary knowledge of phonetics. To the teacher of even mature students in phonetics certain deficiencies appear at the beginning. Students have no definite notion of the position of the accent in words; they cannot distinguish between spelling and

sound; often they cannot isolate a sound from the rest of a word; often they cannot distinguish between voiced and voiceless consonants, even after knowing the meaning of the terms; between such different sounds as the vowel of *father* and that of *all* or that of *poor* and that of *purr;* between a simple vowel as in *let* and a diphthong as in *ice.*

A serious aspect of this general lack of knowledge of the simplest phonetic facts of our own language, is that many schoolteachers have wrong habits of speech, usually artificially acquired, and they unintentionally mislead their pupils in pronunciation. This is to be deplored, not as a matter of blame to the teachers, but as a serious defect in an educational system which fails to provide and require the necessary preparation of the teacher. Realizing this defect, the Board of Education in England several years ago made phonetics a requirement in the preparation of elementary-school teachers.

To cite only a single instance of the present situation in our schools, the writer has repeatedly heard schoolteachers insist on the full pronunciation of the vowels in the unaccented syllables of words—a rule which neither they nor their pupils can follow in natural, unconscious speech. One city teacher of high standing drilled her pupils carefully to pronounce the noun *subject* with the full sound of the *e* as in *let*, and in the same recitation, after passing to another topic, herself repeatedly pronounced the same word naturally, with obscure *e* (ɪ), as is usual in standard English. The author has observed scores of similar instances of false teaching in the pronunciation of teachers otherwise well prepared and devoted to their work.

A valuable result of an elementary knowledge of phonetics is the interest it creates in the pronunciation of English in different regions of America and England. Probably no intelligent person actually expects cultivated people in the South, the East, and the West to pronounce alike. Yet much criticism, or politely

silent contempt, of the pronunciations of cultivated people in other localities than our own is common. A student of phonetics soon learns not only to refrain from criticizing pronunciations that differ from his own, but to expect them and listen for them with respectful, intelligent interest. He is able to refer the pronunciations he hears to natural and regular laws of linguistic development and behavior. He is apt to learn that certain tendencies he has been tempted to criticize are just as natural and reasonable as many that he follows himself. As his observation becomes more accurate, he will cease to help perpetuate such popular fallacies, as, e.g., that the Bostonian drops all his *r's*, or that every Englishman drops his *h's*. He will learn that he has been observing the speech of others only in the most superficial and fragmentary way; and, in turn, his attention will be sharpened to the peculiarities of the speech of his own region.

Some knowledge of phonetics will not only broaden one's mind in his attitude toward the speech of other localities, but will put him in a more rational position with reference to the questions of authority and standards of usage. No standard of speech can be slavishly followed with safety. There can be no standard of speech that dispenses with a large element of individual choice requiring the decisions of the judgment in applying it. The student of phonetics substitutes an enlightened judgment in matters of pronunciation for every other kind of authority. Not that he becomes independent of standards, but that he learns to evaluate those standards as well as to render intelligent to himself his own attitude toward them.

Illustration of the statements in the last two paragraphs is found in the questions and discussion that frequently arise over the pronunciation of *u* in *rule*, *lute*, *blue*, *new*, *tutor*, of *tu* in words like *nature*, *fortune*, of *du* in *education*, *verdure*, of *a* in *ask*, *class*, *half*, *laugh*, *aunt*, of *o* in *coarse*, *door*, *core*, of *a* or *e* in *care*, *there*, and in many similar questions. The oft repeated question,

"Which is correct?" and the too oft repeated dogmatic answer are both quite inapplicable to the cases. For an intelligent answer something more is needed than a firm conviction of one's own way of pronouncing them and a readiness to criticize those who differ. There is necessary some knowledge of the phonetic nature of these sounds, and of their historical development and distribution, together with the judicial state of mind that results from such knowledge.

Among the practical uses of phonetics is to be mentioned its effect in stimulating good articulation. Familiar knowledge and daily observation of the manner in which the sounds of speech are made with the speech organs develops an habitual consciousness of the operation of those organs in daily speech that results in improved articulation. The habit of good articulation—which in its purely muscular aspects can be taught by a good elocutionist—by the study of phonetics is at the same time combined with some scientific knowledge of the phonetic structure of English, so that the result is not artificial but natural. And the need in present American speech of clear and deliberate enunciation, which at the same time shall not be artificially "elocutionary," is very great, not only in respect to the communicative and expressive function of spoken English, but also in respect to its function in the interpretation of literature—especially poetry.

Great as is the practical value of phonetics, and the need of such study in America for the improvement of our speech, the author wishes to emphasize his firm conviction, not much shaken by the numerous onslaughts of recent educational theory, of the supreme importance of the study of speech as a part of the larger field of English considered as a branch of science. Whatever of practical value phonetics, or any study of English, may have, its place in an educational program is determined by its value as a branch of knowledge.

Phonetics has exceptional qualities as a branch of science

adapted to educational ends. Its large field of basic facts—its raw material—lies all about us and is immediately available to every student—the facts of pronunciation always within reach of our personal observation. Moreover, they are facts of constantly vital and social interest. They are elemental facts of mental behavior in one aspect of experience; and the observation of these facts constitutes as real an approach, so far as it goes, to the understanding of mental phenomena as the study of psychology.

The handling of these facts by the student involves the same mental processes of accurate observation, comparison, logical deduction, and generalized concepts, that have been rightly the chief argument for the disciplinary value of the study of Latin and Greek. No argument has been adduced for the disciplinary value of Latin and Greek that does not equally apply to the study of English language if undertaken with equal thoroughness. The author would heartily approve more study of Latin and Greek, but we should open our eyes to the wealth of material, fresh and unstaled, which we have mostly neglected, in our native language, admirably suited as a basis of a sound culture in a program of liberal arts, and implying as well a far more certain attainment of the practical ends already theoretically claimed for the study of English.

HISTORICAL SUGGESTIONS

In order to understand many aspects of our modern English it is essential to be able to form some idea of the way in which various features of our language have come to be what they are. It is therefore necessary for the student of phonetics to have some background of the history of the English language. The following facts should be mastered by the student.

1. English is a descendant of the Germanic branch of the Indo-European family of languages. Latin and Greek are sister branches to the Germanic. Since English is descended from the Germanic branch, and French and Spanish from the sister Latin branch, English may be said to be a cousin of French and Spanish. Since modern German and English are both descendants from the Germanic branch, they are sister languages, more recently related than Latin and Germanic.

The speakers of the English descendant of the Germanic branch migrated from northwestern Europe to England in the fifth century A.D. There the language went on developing. The earliest written records of English we have are from the seventh century. The language from that time till about 1150 is called Anglo-Saxon or **Old English (OE).** King Alfred, who wrote several important works, may conveniently be taken as the chief representative of the Old English period. From the reign of Henry II (about 1150) to that of Henry VIII (about 1500) the language is called **Middle English (ME).** Chaucer (1340–1400), in the reign of Richard II, may be taken as the chief representative of Middle English. From about 1500 to the present is **Modern English (MnE),** that from 1500 to 1700 being **Early Modern,** and from 1700 to 1900+, **Late Modern.**

The student should avoid the mistake of applying the term "Old English" to any stage of earlier English later than 1150. The term is often wrongly applied to Chaucer's English, or even

to Shakespeare's. Chaucer's language is Middle English, and Shakespeare's Early Modern. Some try to avoid ambiguity by calling English before 1150 "Anglo-Saxon," a term misleading in other respects. The name was never applied to their language by the Anglo-Saxons themselves, and it unfortunately helps to foster the too prevalent notion that King Alfred's English was a foreign tongue that did not become English till it was united with French. King Alfred and his contemporaries called their language "English," and neither its name nor its essential character was changed by the later assimilation of French and Latin words to its vocabulary. The student should learn these periods carefully, as frequent reference is made to them.

2. Until the **Scandinavian Conquests** and extensive fusion with the English people (8th–11th cc.), and the **Norman Conquest** (1066), the words in English were mostly native; i.e., words that had descended from parents to children through the West Germanic branch from the original word-stock of Indo-European. But from their Norwegian and Danish neighbors in England the English borrowed several hundred words, as *fellow*, *loose*, *raise*, etc. Likewise a great number of place-names in England are of Scandinavian origin, from which many family names are derived.

When the **Norman French** settlers came to England in 1066, they of course brought with them their own language—a northern dialect of French. This was spoken in England until about 1350 in a form somewhat changed from its continental original and now called **Anglo-French.** Because the government and the church in England were then under the control of the Normans, French was the language of the higher classes and of literature, while English continued to be spoken by the native lower classes. About 1350 English again became the language of the ruling class, and French became a possession of only the educated. In the meantime the Central, or Parisian, French had

exerted such influence on Anglo-French that Parisian French was now the preferred form in England, and the great body of **French loan-words** taken into English from about 1250 to 1400 are chiefly of the **Central French** form. However, a few Anglo-French speech sounds came into English from the French spoken in England and developed into Modern English along with other English sounds.[1]

After about 1250—nearly two hundred years after the conquest—Parisian French words flowed into England in great numbers for nearly two hundred years,[2] and were learned and used as English words alongside the native words. In the main they were pronounced—except for the inflectional endings—as French was at that time pronounced, which was very different from modern French. The accent was at first that of the French, usually near the final syllable, but this soon shifted in many words to a place near the beginning, where most native words were accented, though often in the longer words a secondary accent remained where the main French accent had been. In the following centuries many **Latin words,** too, were introduced through literature and scholarship, and became assimilated into the English word-stock.

3. Important as are these two great additions—the French and the Latin—to the English vocabulary, they did not otherwise much affect the language. They did not essentially modify the pronunciation of native words, or the grammar and syntax of English. The **essential structure** of English is today what it was in King Alfred's day, before the Norman Conquest.

Important changes, however, were already going on before

[1] See §§30 and 35 of *A Brief History of the English Language*, pp. lxxxiv–v of Webster's *New International Dictionary, Second Edition.*

[2] The influx, in somewhat lesser numbers, has continued to the present day. See Jespersen, *Growth and Structure of the English Language*, Leipzig, 1905, §95, and A. C. Baugh, in *Mod. Lang. Notes*, February, 1935, pp. 90–93, and his *History of the English Language*, N. Y., 1935.

the influx of the new borrowed words. They are chiefly of five kinds: (1) Changes in the **meanings** of words—not of great importance in the study of phonetics. (2) Changes in **syntax,** or construction—also of minor importance to phonetics. (3) Changes in **inflectional endings** for number, case, tense, etc. These are of considerable importance to phonetics, for change and loss of inflectional endings have brought about many changes in pronunciation. (4) Changes in **stress.** These have also caused considerable changes in pronunciation—especially in the shifting of the accent in borrowed words. (5) Changes in **consonant and vowel sounds.** These are of central importance to phonetics. Many of the foregoing changes are still going on. They will be referred to as occasion requires.

4. Changes in pronunciation arise from two principal sources —**phonetic change** and **change by analogy. Phonetic change** is the gradual, progressive, unconscious change in the sounds of words that results in part, at any rate, from our inability to imitate and reproduce perfectly what we hear. Thus the word *stone,* which in King Alfred's time was pronounced "stahn" with *a* as in *father,* changed so gradually that few, if any, realized that any change was going on till it reached its present pronunciation. And so with other phonetic changes. **Analogical change** is quite different in its operation. It can best be exemplified. When a child says *goed* for *went,* he does so not because he has heard *goed,* but because he has frequently heard *showed, snowed, tried, rained, burned,* and many others—all indicating past time by means of a **d** sound at the end. Hence by imitating, not the whole word, but the method of adding endings, he adds the same ending to *go* before he has fully learned the form *went.* Though *goed* is often heard in children's speech, the form has never got into general use. But in the past, children and adults have created many such new forms, many of which have become general and have crowded out older forms. For instance, the

proper past tense of the verb *step* was formerly *stōp*. But some one at some time first said *stept* instead of *stōp*, in imitation of many verbs that formed their past tense by adding a **t** sound, such as *lost*, *stopt*, *walkt*, etc. Many other speakers did the same thing, till finally everybody gradually abandoned the old form *stōp* and adopted the new form *stept*.[2a]

In the same manner a large number of verbs have been changed by analogy from the "strong" to the "weak" conjugation. OE had the same two classes of verbs as MnE—the "irregular" or "strong" verbs like *drive, drove, driven; sing, sang, sung; fall, fell, fallen;* and the "regular" or "weak" verbs like *fill, filled, filled; deem, deemed, deemed; keep, kept, kept.* But from the earliest historical period of the English language the strong verbs have been constantly changing to the form of the weak. The following verbs were originally strong, but by analogy have become weak: *bake, bow, carve, chew, creep, delve, flee, help, laugh, melt, milk, mourn, seethe, shave, shove, spurn, step, swell, wash, yell, yelp, yield;* and about sixty others.

Another example of change by analogy is the plural *-s* of nouns. Formerly only one group of nouns formed their plural by the addition of *-s*. Some made the plural by adding *-en*, as three nouns still do—*oxen, children, brethren;* others by adding *-e*, of which no trace remains; others had the plural identical with the singular, as a few still do—*deer, sheep, swine.* But finally, by analogy of the group that added *-s*, all regular nouns have now come to form their plural in *-s*.

5. Though a **standard literary English** arose in Chaucer's day, it was in the 16th c. that the speech of London, Oxford, and Cambridge gained a place as the **spoken standard** to which the educated in various parts of England tended to conform. But their adherence to this type of speech was never complete, and

[2a] Strictly, these are not directly changes in pronunciation, but substitution of different grammatical forms. Changes in speech sounds by analogy are rarer; as the British pronunciation of *lather* as **lɑðə** by analogy of *father, rather;* or the **ĕ** of *friend* from *friendship*, or the **ĭ** of *wind* from *windmill.* See also Webster, *Pronunciation*, §1.

even today speakers in South England vary considerably in their pronunciation of present-day "Standard English."

Some of the features of standard English in the 17th c., when America was settled, were the following: (1) **r** was sounded wherever it was spelt. (2) The vowel of *half, last, path, dance* was like that today in *hat, man*. (3) The vowel in *stop, rob* sounded like the short of the one in *father*. (4) The vowels of *hate, spade*, and of *note, rode* were simple vowels, not diphthongs as in present British. (5) The vowel in *due, true* was **ɪu**, not a *yoo* and *oo* sound as in present British. (6) The vowel in *borne* was *ō*, distinct from the *aw* sound in *born*. (7) The vowel of *talk, draw* was nearer the *ah* sound than today. (8) The **h** in *what, when* was sounded. (9) Words like *dictionary, cemetery, dormitory* had a secondary accent.

By 1800 the speech of London had so changed from the standard form that was still used away from the metropolis that it became the basis of a **new standard form**, while the older one continued to be spoken in the more remote districts, especially the North and America, to which it had been taken in the 17th c. By 1900 the new British type had the following features among others: (1) **r** was sounded only before a vowel. (2) The vowel in *half*, etc., had become that in *father*. (3) The vowel in *stop, rob* had moved toward that in *talk*. (4) The vowels of *hate, spade*, and of *note, rode* had become diphthongs. (5) The diphthong in *due, true* had become *yoo* and *oo* sounds. (6) The vowel of *borne* had become like that in *born*. (7) The vowel in *talk* had gone nearer to *ō*. (8) The **h** sound had gone from *what, when*. (9) *Dictionary*, etc., had lost the secondary accent.

As shown long ago by W. D. Whitney and E. S. Sheldon,[3] and recently by Dr. Orbeck,[4] American English came, not chiefly from British local dialects, but from standard British of the 17th c. The striking resemblance of General American to Northern British in certain features has been cited to show that

[3] See *Dialect Notes*, Vol. I, p. 292.

[4] Anders Orbeck, *Early New England Pronunciation*, Ann Arbor, 1927.

GA came from Northern England. But these features belonged to 17th c. standard British. The same is true of resemblances to GA found in other British local dialects: they have disappeared from standard British but remained in GA.

Exactly how the three chief types of American English—**Eastern, Southern,** and **General American**—are derived from British is not yet determined. But there is much evidence that the chief colonial centers, Boston, New York, Richmond, and Charleston, continuing in closer cultural contact with London than did the rest of the rapidly increasing colonial population, shared more of the advancing changes of Southern British. Hence Eastern and Southern American today are more like present Southern British than is GA, which preserves more features of the 17th c. standard British.

A rough computation based on recent census estimates indicates that approximately eleven million Americans and Canadians now speak the Eastern type of American English, twenty-six million the Southern, and ninety million the General American type.[5]

A careful distinction must be made between *standard* English and *uniform* English. The following statements should be thoughtfully pondered:

> I am not one of those who believe in the desirability or the feasibility of setting up any one form of pronunciation as a standard for the English speaking world.—Daniel Jones, M.A., Professor of Phonetics, University College, London, in *An English Pronouncing Dictionary*, 1924, p. ix.

> The so-called standard language is not a fixed and infallible standard, but is itself constantly changing with the course of time, and is different in the different places where it is spoken.—Edward S. Sheldon, late Professor of Romance Languages, Harvard University, in *Dialect Notes*, I, p. 287.

[5] This represents a revision in the light of later population figures of an estimate published in *Le Maître Phonétique* for Jan.–Mars, 1927. See also comments by C. K. Thomas, *Quarterly Journal of Speech*, Nov., 1927.

A sufficient definition of the term standard will perhaps be found in the statement that speech is standard when it passes current in actual use among persons who must be accounted as among the conservers and representatives of the approved social traditions of a community.—George P. Krapp, Ph.D., late Professor of English, Columbia University, in *The English Language in America*, I, p. 7.

The listener who writes to ask the "correct way" of pronouncing a word quite evidently assumes that there *is* a "correct way." In all these queries and criticisms there is implied the idea of a standard pronunciation. We have a standard yard, a standard pound weight, a standard sovereign, and a standard pint. The yard does not vary from Aberdeen to Plymouth, and the pint pot contains as much in Mayfair as in Bethnal Green. Unfortunately, speech is not capable of rigid measurement, and there is no absolute standard of pronunciation. Pronunciation varies from district to district, from class to class, from character to character, in proportion to the local, social, or personal difference that separates them. . . . It is quite evident that we are not entitled to conclude that there is *one* standard pronunciation, *one* and *only one* right way of speaking English. There are varieties that are acceptable throughout the country, and others that are not.—A. Lloyd James, M.A., Professor of Phonetics, University of London, and Honorary Secretary, Advisory Committee on Spoken English of the British Broadcasting Corporation, in *Broadcast English*, I, 3d ed., 1935, pp. 9 f.

When we consider all the varieties of English spoken by those who are admitted to speak "good English" in the different British colonies and in the different parts of the United States, we must recognise that there is still no Standard Spoken English in any strict sense of the term. In every part of the English-speaking world some type of spoken English, that which is used by the educated and superior class within the community, is considered "good English," as contrasted with the "Vulgar English" and local dialects spoken by other classes of the community. If we use the term Standard Spoken English at all, we must recognise that it is merely a convenient way of speaking of the various kinds of "good English" that are current in various parts of the English-speaking world.—Samuel Moore, Ph.D., late Professor of English, University of Michigan, and Editor of the *Middle English Dictionary*, in *Historical Outlines of English Phonology and Morphology*, 2d ed., 1929, p. 114.

The question, "What pronunciation is correct?" is too often raised without first considering the most important of all conditions for answering it; namely, "Correct for what occasion

and under what circumstances?" Good spoken English, even in the same dialect, is not all alike. Omitting consideration of natural local dialect of the uneducated, which is "good" in its place, there is, first, the kind of speech appropriate to the most informal and personal occasions, the most informal colloquial style.[a] Then there is that colloquial style which has been aptly called "the speech of well-bred ease."[b] Both styles use such familiar contractions as *I'm*, *he's*, *it's*, *doesn't*, *don't*, *can't*, *shan't*, *won't*, etc., the chief difference between the first and the second being in vocabulary and speed of utterance. Next there is a more formal colloquial speech, which cannot be sharply distinguished from the more familiar colloquial, differing somewhat in the vocabulary called forth by more formal circumstances and less familiar acquaintance, but also making considerable use of the contractions mentioned. More formal still is the public-speaking style. In this the need of being understood by large audiences calls forth more careful sentence structure and more deliberate and clearer enunciation, especially of the consonant sounds and the accented vowel sounds. Most formal of all is the public-reading style, used in declamation, literary reading, and church services. For practical purposes we may then designate four principal styles of good spoken English as (1) **familiar colloquial,** (2) **formal colloquial,** (3) **public-speaking style,** and (4) **public-reading style.**

The difference between these styles has often been exaggerated, and the effort to use a supposed formal style has led to artificial elocutionary delivery and distorted pronunciation of words that have had the effect of removing such utterances from the actual interests of life and giving them an air of unreality. The present tendency among the most cultivated and effective pub-

[a] Look up the definition of *colloquial* in Webster. The term is often misused.

[b] Also called "Easy English" by Mr. Wallace Rice in the *English Journal, College Edition,* June, 1934.

lic speakers is toward a more or less formal colloquial style for public address,[c] the difference from familiar colloquial being more in subject matter and vocabulary than in pronunciation.

The most important of all styles is the **familiar cultivated colloquial,** both because it is most used by the most important people, and because it forms the basis of all more formal styles both spoken and written. Professor Henry Cecil Wyld, of Oxford University, writes: "This style of literary prose is alive and expressive, chiefly in so far as it is rooted in that of colloquial utterance. The general atmosphere of both is the same in any age. . . . The style of Literature is rooted in the life and conversation of the age. From these sources alone can prose renew its life from generation to generation. When Literary prose style loses touch with the spoken language it becomes lifeless and unexpressive, powerless to 'strike the ear, the heart, or the fancy,' remote alike from human feeling and from the speech of man because it has never known real life and movement."[d]

A thoughtless mistake made by many teachers and writers on English is to assume that the most formal style is the only one to be considered correct, to whom the word *colloquial* is synonymous with *bad.* On this, too, Professor Wyld makes the observation that there is very little actual difference between the best formal and the best colloquial style: "As a matter of fact, the platform or pulpit pronunciation of the best public speakers hardly differs from that of the home circle. Of what use is it to insist that the pronunciation of the schoolroom shall be grander and more elaborate than that heard in Westminster Abbey, or in the High Court of Parliament?"[e]

[c] Cf. the article "The King's English," in *American Speech,* June, 1931, p. 368.

[d] *History of Modern Colloquial English,* London, 1925, pp. 157, 188.

[e] *The Teaching of Reading,* London, 1924, p. 19.

THE REPRESENTATION OF SPEECH SOUNDS

6. Language is primarily speech; primarily, both in origin and in respect to importance. The first parent speech of our language originated, gradually developed, split up, in the course of group migrations, into many sister languages, underwent numberless changes in word-stock, word meanings, grammar and syntax, and pronunciation, centuries before any one succeeded in making language visible to the eye in writing. Written English in our present alphabet is hardly fifteen hundred years old. In present importance, also, spoken English is far in advance of written. Even people engaged chiefly in intellectual affairs speak a hundred words where they write one; with the average man the ratio of spoken to written is far greater. But the measure of the relative importance of speech and of written or printed language is not quantitative; a personal interview is far better than a letter to accomplish a practical end. Speech is a living activity inseparable from personality; written or printed language is only an imperfect picture of it.

In the study of language we are constantly tempted to forget that speech is primary, and writing and reading secondary, because speech is wholly unconscious in its beginning with the individual, and virtually so throughout life. But our conscious efforts with language—our first laborious reading, spelling, and writing, the later study of grammar and composition, and of literature, and our study of the printed page in other subjects—all these deal with the written or printed representation of speech to the eye; and so in our conscious intellectual life the written language assumes a prominence all out of proportion to its actual daily importance. Particularly in phonetics is it necessary to remind ourselves at every turn that **the real language is**

speech—spoken groups of words—and not the written or printed signs representing it to the eye.

7. Though the English people who migrated to the British Isles in the fifth century possessed an alphabet, called runes, when they came, the great body of their literature was not written down, but was composed and spoken orally, and transmitted by memory. In the sixth century the missionaries from Rome who had settled in Ireland began to Christianize England in Northumbria, and thus introduced the **Roman alphabet** into England for the writing of the native language.

A few changes in the use of the letters have been made since the Roman alphabet began to be used to represent English sounds. The old English scribes used for the first sound in *we* a character *ƿ* called *wĕn*. In the thirteenth century this was abandoned and *uu* or *vv* ("double *u*"), and then *w*, was used in its place. A sign *þ* was used for the first sound in the word *thin* and also for that in *this*. The use of this character for the *th* sound persisted in occasional use till the seventeenth century, though after printing began, the letter *y* was often used when type fonts lacked *þ*. This is sometimes seen now in imitation of old style, though most people are now unaware that it stands for the *th* sound, and wrongly pronounce it as *y* in *you*. Cf. §187.

8. Until the seventeenth century *u* and *v* were not used as now—*u* for the vowel and *v* for the consonant—but were regarded as merely different forms of the same letter, each of which represented either a vowel or a consonant sound. The usual rule was to use *v* at the beginning of a word for consonant or vowel, and *u* in the middle or at the end as consonant or vowel. Thus in the Authorized Version of the Bible in 1611 we find, "When thou tillest the ground, it shall not henceforth yeeld vnto thee her strength: A fugitiue and a vagabond shalt thou be in the earth" (Gen. 4: 12); and this is the usage through-

out the Bible and books of the sixteenth century and before. Milton in 1645 followed the present method of using *u* for the vowel and *v* for the consonant, regardless of position in the word. But not till the nineteenth century did dictionaries separate words with initial *u* from those with initial *v*.

9. Likewise *i* and *j* were formerly merely different forms of the same letter, which had the value of either the vowel in *it* or the first and second consonant in *judge*. At first i alone was used, without the dot. When initial, this was often prolonged above the line to keep it distinct from the following letter. This form finally appeared, after printing began, as I. The dot was added to ı, also to avoid confusion with adjacent letters, as today. In medieval European writing, at the end of words i was often prolonged below the line, giving the form j. This was used by English scribes in numerals, as *j*, *ij*, *iij*, *vj*, *xij*, etc., and at the end of Latin words such as *filij*. (In English words final *i* was replaced by *y*.) These different forms were used as vowel or consonant. Thus we find in the Bible of 1611, "I am iealous for Ierusalem, and for Zion, with a great iealousie" (Zech. 1: 14). Again Milton was among the first to adopt the present practice of using *i* for vowel and *j* for consonant, but dictionaries did not separate words with initial *i* and *j* till the nineteenth century, and *u* and *v*, *i* and *j* were not separated in the British Museum catalog till about 1930.

10. When English began to be written in Roman letters, the spelling was as nearly phonetic as possible; i.e., each scribe represented his own English sounds by the letter that stood for the Latin sound nearest to his own. But even at first there were some discrepancies. For example, the letter *f* was used both for the sound in *fat* and for that in *over* (then spelt *ofer*); *s* stood for the sound in *fast* and in *rise; þ* stood for the sound of *th* in *thin* and in *writhe*, and *ð* stood for the same also; *g* stood for the

sound in *get* and in *yet*. As time went on, there was a constantly increasing discrepancy between sound and spelling. An alphabet remains comparatively fixed, and habits of spelling tend to remain, rather than to change—especially since the use of printing—for they are based on visible and conscious imitation. Speech, on the other hand, is based on unconscious and somewhat imperfect imitation, and so changes by imperceptible and continuous variation. Thus the word *man* is still spelt as it was in King Alfred's time, but has changed in pronunciation from "mŏn" to its present pronunciation. *Hope* in Chaucer's day was pronounced "haw-pĕ"; but though it has changed to its present sound, it is still spelt *hope* as it was in Chaucer's day. So after English sounds began to be represented in Roman letters, the sounds tended to depart farther and farther from what the letters had at first suggested. It is obvious that if this divergence between sound and spelling continued, the sounds would after a while become entirely different from what the letters had at first suggested. Then either the spelling must fail to serve its purpose, and new letters must be used, or the letters must gradually come to suggest different sounds from those at first associated with them. In fact, the latter is what happened, but not with all the letters at the same time. From the fifteenth to the seventeenth centuries the sounds of English had so changed that it is now true with most vowel sounds and some consonant sounds that the letters do not ordinarily stand for the sounds which had been associated with the Roman letters in English down to the fifteenth century, and in other European languages down to the present time. The change in vowel sounds that occurred from the time of Chaucer to the present is called **The Great Vowel Shift,** and consisted, for the long vowels, in the raising of the tongue for each vowel except the two already highest (**iː** and **uː**), which became diphthongs. See §§330, 334.

11. The attempt in English to keep up with the changing sounds by using the same letters with changed values was not entirely successful. Hence we find in present English that the single letter *a*, for example, represents the different vowel sounds in such words as *name*, *bare*, *man*, *father*, *all*, *village*, *lunar*, *sofa;* the letter *e* spells the different sounds in *be*, *here*, *there*, *bed*, *alert*, *England*, *moment*, *added*, and very often no sound at all, as in *life*, *make;* and so with other vowel letters. The consonants are more consistent with their spelling: *b*, *h*, *j*, *k*, *l*, *m*, *q*, *v*, *z* nearly always denote one sound each, though most of them can be silent. But *c* denotes the sound in *city*, *sacrifice*, v. (**z**), *cat*, *vicious; d* the sound in *day*, *walked; f* that in *life*, *of; g* that in *get*, *age*, or none, as in *caught; n* that in *fin*, *finger*, or none, as in *solemn; s* that in *say*, *rise*, *sure*, *measure*, or none, as in *island*. On the other hand, the same sound is often represented by more than one letter; thus the vowel sound in *mate* is represented by *a;* the same sound in *they* by *ey*, in *vein* by *ei*, in *hail* by *ai*, in *break* by *ea*, in *gauge* by *au*. The sound represented by *e* in *be* is represented by *ee* in *see*, *ea* in *heap*, *ie* in *believe*, *ey* in *key*, *ei* in *seize*, *i* in *machine*, *eo* in *people*. The obscure sound at the end of *sofa* may be represented by any vowel letter and by many combinations, as by *a* in *sofa*, *e* in *fallen*, *i* in *possible*, *o* in *gallop*, *u* in *suppose*, *ai* in *villain*, *ou* in *famous*, *eou* in *outrageous*, etc.

12. It is obvious from these illustrations that we could not form a definite idea how present-day English is pronounced if we were dependent solely on the current spelling and had not already learned to speak before learning to spell. Much more is it true then, that we cannot *study* pronunciation successfully with only the ordinary spelling to guide us and to represent it with. In order to consider pronunciation scientifically, and to record and communicate the results of our study, we must make

use of some system of symbols that shall unmistakably represent the sounds of speech.

In the main, such a phonetic alphabet must meet two requirements: (1) each symbol shall represent only one speech sound; (2) each speech sound shall have a symbol to represent it. Several such phonetic alphabets are in use by phoneticians and lexicographers. The one now most widely used is that of the **International Phonetic Association** (IPA) and is used in this book. The official publication of the IPA is *Le Maître Phonétique* (Quarterly), and contains articles and specimens in various modern languages, printed in this alphabet.

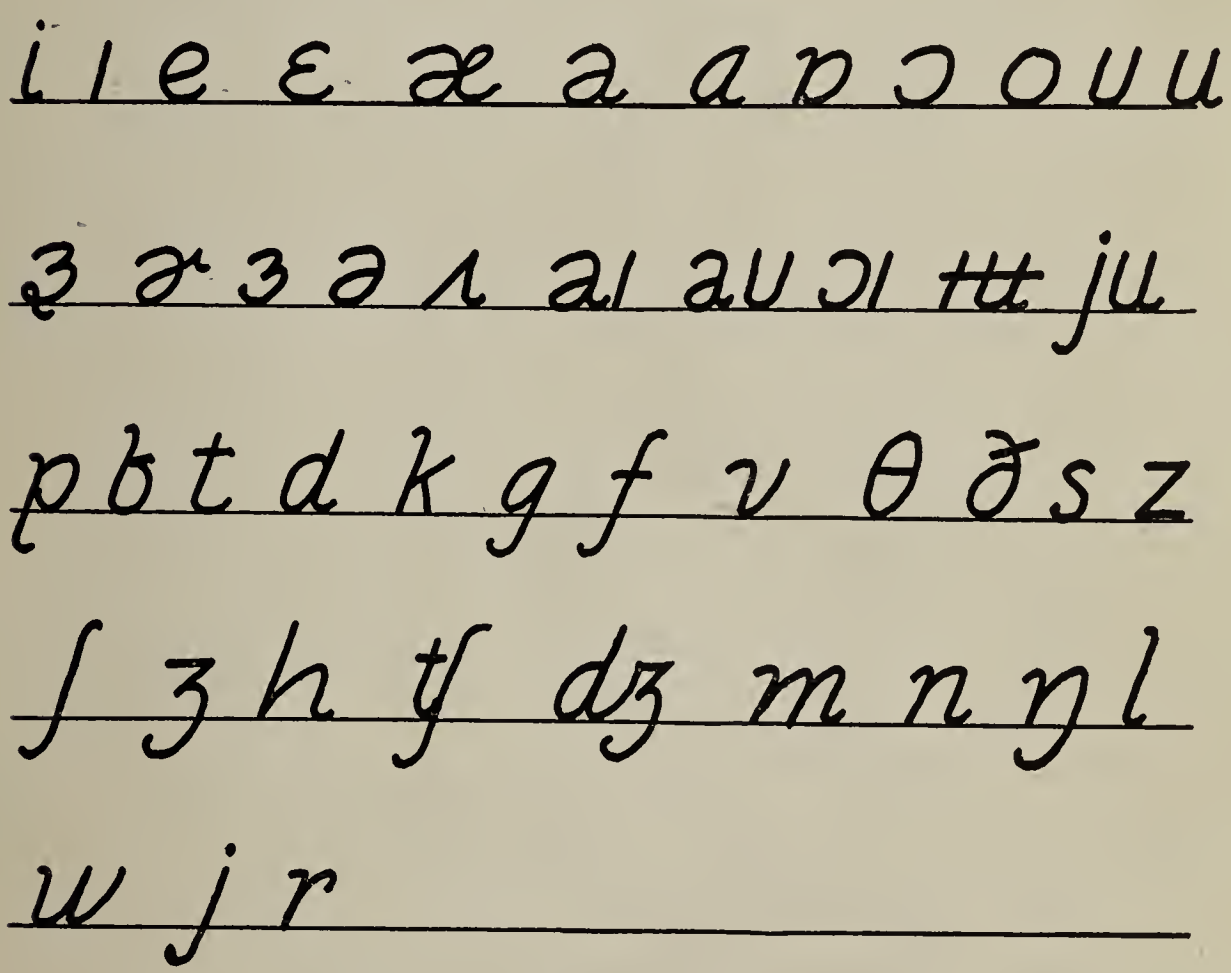

FIG. 1.—Script (noncursive) forms of the Phonetic Symbols.

PHONETIC SYMBOLS

Vowels

No.	Symbol	Key Word	Pronunciation
1.	i	*beet*	**bit**
2.	ɪ	*bit, easy*	**bɪt, izɪ**
3.	e	*bait*	**bet**
4.	ɛ	*bet*	**bɛt**
5.	æ	*bat*	**bæt**
6.	a Sc.	*cat*	**kat.** Between **æ** and **ɑ**; see §18.
7.	ɑ	*father*	**fɑðɚ**
		fodder	**fɑdɚ.** General American "short *o*"; §19.
8.	ɒ	*fodder*	**fɒdə.** British "short *o*" (between **ɑ** and **ɔ**); §19.
9.	ɔ	*law, horse*	**lɔ, hɔɚs**
10.	o	*coat*	**kot**
11.	ʊ	*pull*	**pʊl**
12.	u	*pool*	**pul**
13.	ɝ	ˈ*further*	**ˈfɝðɚ.** Accented. General American.
		perˈverse	**pɚˈvɝs**
14.	ɚ	ˈ*further*	**ˈfɝðɚ.** Unaccented. General American.
		perˈverse	**pɚˈvɝs**
15.	ɜ	ˈ*further*	**ˈfɜðə.** Accented. East, South, and England.
		perˈverse	**pəˈvɜs**
16.	ə	ˈ*custom*	**ˈkʌstəm.** Unaccented.
		aˈbove	**əˈbʌv**
17.	ʌ	ˈ*custom*	**ˈkʌstəm.** Accented.
		aˈbove	**əˈbʌv**

DIPHTHONGS

No.	SYMBOL	KEY WORD	PRONUNCIATION
18.	**aɪ**	*ice*	**aɪs**
19.	**aʊ**	*house*	**haʊs**
20.	**ɔɪ**	*boy*	**bɔɪ**
21.	**ɪʊ**	*abuse*	**əbɪʊz**
22.	**ju**	*use*	**juz**

For other diphthongs, see §§352 ff.

CONSONANTS

Letters not numbered have their usual names

No.	SYMBOL	KEY WORD	PRONUNCIATION
		Stops	
	p	*peep*	**pip**
	b	*bib*	**bɪb**
	t	*toot*	**tut**
	d	*did*	**dɪd**
	k	*cook*	**kʊk**
	g	*gag*	**gæg**
		Fricatives	
	f	*fife*	**faɪf**
	v	*valve*	**vælv**
23.	**θ**	*ether*	**iθɚ**
24.	**ð**	*either*	**iðɚ**
	s	*cease*	**sis**
	z	*zones*	**zonz**
25.	**ʃ**	*mission*	**mɪʃən**
26.	**ʒ**	*vision*	**vɪʒən**
	h	*hail*	**hel**
		Affricates	
27.	**tʃ**	*church*	**tʃɜtʃ**
28.	**dʒ**	*judge*	**dʒʌdʒ**
		Sonorants	
	m	*maim*	**mem**
	n	*noon*	**nun**
29.	**ŋ**	*sing*	**sɪŋ**
	l	*lull*	**lʌl**
		Glides	
	w	*wail*	**wel**
	hw	*whale*	**hwel**
	j	*young*	**jʌŋ**
	r	*road*	**rod**

Note: A phonograph record of the author's speech sounds may be got from Walter C. Garwick, Rye, N. Y.

13. Accent is indicated by the mark (ˈ) for **primary accent** and (ˌ) for **secondary,** each placed **before** the accented syllable, as in ˈ*shoe*ˌ*maker* **ˈʃuˌme kɚ,** ˈ*drawing* ˌ*room* **ˈdrɔ ɪŋ ˌrum.** Wholly unaccented syllables are not marked, as in ˈ*nation* **ˈne ʃən,** *be*ˈ*fore* **bɪˈfoɚ.** When it is desired to indicate a subordinate accent weaker than secondary, this may be indicated by a dot, thus ˌ·: ˌ*mis*·*under*ˈ*standing* **ˌmɪs·ʌn dɚˈstæn dɪŋ,** in which four degrees of accent are perceptible by comparison of adjacent syllables—**primary, secondary, light,** and **no accent.** It is usually sufficient to recognize three degrees only—primary, secondary, and no accent. Syllables with a considerable degree of accent are often left unmarked when adjacent to the syllable that has primary accent, as in ˈ*accent* **ˈæk sɛnt,** ˈ*contract* **ˈkɑn trækt.** See §§104 ff.

14. The sign ː after a vowel symbol indicates that the vowel is relatively **long in duration.** The sign ˑ may be used to indicate **intermediate** length. When length signs are systematically used, short vowels are unmarked. In American transcription it is seldom important to indicate length.

15. The plus sign (+) placed after a symbol (usually a vowel symbol), indicates a pronunciation of it with more advanced tongue position (§§73 ff.); thus **ɑ+** means "advanced **ɑ.**" Similarly the minus sign (−) means "with retracted tongue," as **æ−**, "retracted **æ.**" The sign ⊥ means "with raised tongue," as **ʊ⊥**, "raised **ʊ,**" and the sign ⊤ means "with lowered tongue," as **ɛ⊤**, "lowered **ɛ.**" The signs may be combined; as **ɪ⊤−**, "lowered and retracted **ɪ.**" Another method of indicating a vowel with higher tongue position than usual is to place a dot under it (ẹ); and of indicating a vowel with lower tongue position than usual, to place a hook under it (ę).

16. In accord with the practice of many phoneticians, the one symbol **ɪ** is used both for the vowel in *bit* and for the final vowel of *easy* and similar words, though the unaccented vowel is not exactly identical with the vowel of *bit*, but leans, in Amer-

ica, slightly toward **i** in *beet* **bit,** and in England, often toward **ɛ** in *bet* **bɛt.** But the last vowel of *easy* is not the same as **i** in *beet* **bit,** and should be written **ɪ.** See §§253 ff.

17. The vowel in words like *air, care, there* sounds between **ɛ** in *very* **vɛɚɪ** and **æ** in *bat* **bæt,** *carry* **kæɚɪ.** Two varieties are in standard use, one nearer to **ɛ** and the other nearer to **æ.** It may be written as in **kɛɚ, ðɛɚ** or **kæɚ, ðæɚ,** according as it most resembles **ɛ** or **æ** (see §§358 ff.). The symbols **ɛ** with hook beneath and **æ** with dot beneath are also available for this class of words. Some writers prefer to write **kɛːɚ** or **kæːɚ.** In most cases no confusion results from writing simply **kɛɚ** or **kæɚ.**

18. The sound **a** (No. 6) as heard in *cat, man,* etc., in the pronunciation of standard English in Scotland and Northern England,[6] is a sound acoustically between **æ** in *sand* and **ɑ** in *father.* It occurs in General American only in the diphthongs **aɪ** and **aʊ,** and as an occasional unconscious variant of **æ.** It is used by some speakers in New England and New York City in words like *ask.* See §§273–85. In transcription it must not be substituted for **ɑ.**

19. The vowel **ɒ,** which sounds between **ɑ** and **ɔ** as it is regularly pronounced in England and locally in America in words with "short *o*" like *not, top, watch, what,* is not often heard in General American, being usually replaced by **ɑ.** See §§286 ff.

20. The symbols **ɜ** and **ɚ** each represent simple **vowels,** expressed in current spelling by a vowel letter and *r,* as in *further* **fɜðɚ.** The symbol **r,** on the other hand, represents a **consonant,** occurring only before a vowel in the same syllable, as in *rate* **ret,** *derive* **dɪˈraɪv.** The vowel **ɜ** occurs only in **syllables of perceptible accent,** as in ˈ*person* **ˈpɜsn̩,** ˈ*per*|*vert* (n.) **ˈpɜ|vɜt,** and is always **syllabic** (is the main vowel of the syllable).[6a] The unaccented **ɚ**

[6] See Grant, §§8, 143; Lloyd, *Preface* and §90.

[6a] Many American phoneticians now prefer to attach the hook indicating "r-coloring" to the top of the symbol **ɜ,** as in the corresponding **ɚ.**

is either syllabic or not. It is syllabic in such words as *better* **bɛt-ɚ**, *maker* **me-kɚ**. But in such words as *far* **fɑɚ**, *farm* **fɑɚm**, *poor* **pʊɚ**, *there* **ðæɚ**, **ðɛɚ**, **ɚ** is the **nonsyllabic vowel** of a **diphthong** (one vowel gliding into another in the same syllable) **ɑɚ**, **ʊɚ**, **æɚ**, **ɛɚ**, just as **ɪ** or **ʊ** is the nonsyllabic vowel of the diphthong **aɪ** or **aʊ** in *ice, house.*[7] The practical rule to know when to write **ɚ** or **r** is, that the consonant **r** occurs only **before another vowel in the same syllable,** as in *rate* **ret**, *try* **traɪ**, *derive* **dɪˈraɪv**, *erratic* **ɛˈrætɪk**, *Eureka* **juˈrikə**. In cases like *very, carry* there is room for doubt whether the pronunciation is not rather **vɛ-rɪ**, **kæ-ɾɪ**, **kɛ-rɪ**, as it probably sometimes is. The question is more fully treated in §377 f. For practical transcription, the question to be faced is, whether the syllable division in *normal speech*[8] comes after, or before, the *r* sound. If it comes after it, the transcription should be **vɛɚɪ**, etc.; if before it, **vɛrɪ**, etc. Note carefully the difference between **flæt-ə-rɪ** and **flæt-ɚ-ɪ**.

21. Observe that the symbol **ə** (No. 16) is to be written **only in wholly unaccented syllables,** as in *aˈbove* **əˈbʌv**, *ˈcustom* **ˈkʌstəm**, *ˈsofa* **ˈsofə**; or in **unstressed monosyllables,** as *ˈtwo of the ˈmen* **ˈtu əv ðə ˈmɛn**. The symbol **ɚ** is likewise only for unaccented positions, either when it is the only vowel in an unaccented syllable or unstressed word, and is thus syllabic, as in *ˈbetter* **ˈbɛt-ɚ**, *ˈmaker* **ˈme-kɚ**, *ˈtwo or ˈthree* **ˈtu ɚ ˈθri**; or when it is the unaccented part, or nonsyllabic vowel, of a diphthong, as in *farm* **fɑɚm**, *poor* **pʊɚ**. On the other hand, the symbols **ɝ** and **ʌ** are not to be written in wholly unaccented syllables or unstressed monosyllables. Note the following examples of the

[7] These diphthongs **ɪɚ** (*here*), **ɛɚ** (*there*), **æɚ** (*there*), **ɑɚ** (*far*), **ɔɚ** (*for*), **oɚ** (*more*), **ʊɚ** (*poor*) are the General American "centering diphthongs," and correspond exactly to the Eastern, Southern, and British centering diphthongs **ɪə, ɛə, æə, ɑ(ə), ɔə, oə, ʊə**. For further discussion see *Vowels in Detail.*

[8] It is easy to pronounce either way in artificially distinct utterance of isolated words. The problem is the same in words like *going,* where we write **go(ʊ)-ɪŋ** rather than **go-wɪŋ**.

correct use of these symbols: *sur|vey* **sɚ|ve**, *|sur|vey* **|sɝ|ve**; *per|vert* **pɚ|vɝt**, *|per|vert* **|pɝ|vɝt**; *|London* **|lʌndən**; *un|less* **ən|lɛs**, *|un|lace* **|ʌn|les**; *|un|done and |done |up* **|ʌn|dʌn ən |dʌn |ʌp**; *|mis.under|stand* **|mɪs.ʌndɚ|stænd**; *up|on* **ə|pɑn**, *|up and |down* **|ʌp ən |daʊn**; *he |heard her* **hi |hɝd ɚ**; *her |mother, not |her* **hɚ |mʌðɚ, nɑt |hɝ**; *farmer* **fɑɚmɚ**, *former* **fɔɚmɚ**, *border* **bɔɚdɚ**, *boarder* **boɚdɚ**, *sure* **ʃʊɚ**, *fair* **fæɚ, fɛɚ**.

It should be noted that **ə** is not only an unaccented substitute for **ʌ**, but for all other accented vowels as well; as in **|kɑntrækt—kən|trækt; kwaɪ|itəs—|kwaɪət; mo|mɛntəm—|momənt; mæn—|postmən; ɪm|poz—ɪmpə|zɪʃən**, etc. Likewise **ɚ** is the unaccented substitute not only for **ɝ**, but for the various centering diphthongs mentioned above; compare **pɑɚt—pɚ|tɪkjələ; sɪmə|læɚətɪ—|sɪmələ; rɪ|kɔɚd—|rɛkɚd; boɚd—|kʌbɚd**, etc. See *Gradation*, §§130 ff.

22. In transcribing words like *abuse, cure, few*, etc., the student must observe whether he pronounces **ɪʉ** or **ju**, both of which are current. **ɪʉ** is never used initially. For **ɪʉ** see §344.

23. For convenience, the letter **g** is printed for the symbol **ɡ**, but in written transcription **g** should always be used.

24. The symbols **m̩, n̩, l̩**, called "syllabic *m, n, l*," indicate **m, n**, and **l** sounds that form syllables without any vowel whatever, either alone, as in *stop 'em* **stɑp m̩**, *listen* **lɪs-n̩**, *battle* **bæt-l̩**, or with one or more other consonants, as in **o-pm̩**, a frequent pronunciation of *open, listened* **lɪs-n̩d**, *handled* **hæn-dl̩d**. The sound **ŋ̩** can also be syllabic, as frequently heard in *I can go* **aɪ kŋ̩ ɡo**, where the syllabic marker is omitted for typographical reasons. For fuller treatment of syllabic consonants, see §§87–92.

25. Caution: Do not use at all the symbols **c, q, x, y.** Use only the symbols as given in the tables, which are sufficient to transcribe all the sounds of English. Moreover, these four letters are IPA symbols for certain sounds of other languages (e.g., **x** is the sound of *ch* in Scottish *loch* **lɒx** and German *ach* **ɑx**, and

y is the sound of French *u* in *lune* **lyn** and German *ü* in *fühlen* **fyːlən**).

Remember that the symbol **g** stands *only* for the sound in *gag* **gæg**, and **j** only for the first sound in *young* **jʌŋ**. Do not use either **g** or **j** for the sound in *gem* **dʒɛm** or *judge* **dʒʌdʒ**.

26. The following passage, transcribed in a colloquial style in the author's pronunciation, contains all the regular sounds of General American. Bear in mind that it is not presented as a model of pronunciation, but simply as an example of natural speech in a certain style.

ðə gret ɛə˞-ə˞ ɪn rɪps kampəzɪʃən wəz ən ɪnsɪʉpə˞əbl̩ əvʒʒən tu ɔl kaɪn(d)z əv prɑfɪtəbl̩ lebə˞. ɪt kudn̩t bi frəm ðə wɑnt əv æsədɪʉətɪ ə˞ pʒsəvɪə˞ən(t)s, fə˞ i wəd sɪt ɑn ə wɛt rɑk, wɪð ə rɑd əz lɔŋ ən hɛvɪ əz ə tɑə˞tə˞z læn(t)s, ən fɪʃ ɔl de wɪðaut ə mʒmə˞, ivən ðo i ʃudn̩t bi ɪnkʒɪdʒd baɪ ə sɪŋgl̩ nɪbl̩. hid kæə˞ɪ ə faulɪŋ-pis ɑn ɪz ʃoldə˞ fə˞ auə˞z təgɛðə˞, trʌdʒɪŋ θru wudz n̩ swɔmps, ənd ʌp hɪl ən daun del, tə ʃut ə fɪʉ skwʒlz ə˞ waɪld pɪdʒɪnz. hi wəd nɛvə˞ rɪfɪʉz tu əsɪst ə nebə˞, ivən ɪn ðə rʌfɪst tɔɪl, ənd wəz ə foə˞most mæn ət ɔl kʌntrɪ frɑlɪks fə˞ hʌskɪŋ ɪndɪən kɔə˞n ə˞ bɪldɪŋ ston fɛn(t)sɪz; ðə wɪmɪn əv ðə vɪlɪdʒ, tu, jʉs tu ɪmplɔɪ ɪm tə rʌn ðɛə˞ ɛə˞ən(d)z, ən tə du sʌtʃ lɪtl̩ ɑd dʒɑbz əz ðɛə˞ lɛs əblaɪdʒɪŋ hʌz-bən(d)z wudn̩t du fɔə˞ ðəm. ɪn ə wʒd, rɪp wəz rɛdɪ tu ətɛn(d) tu ɛnɪbɑdɪz bɪznɪs bət ɪz on; bət əz tə duɪŋ fæmlɪ dɪʉtɪ, ən kipɪŋ ɪz foə˞m ɪn ɔə˞də˞, hi faund ɪt ɪmpɑsəbl̩.

ɪn fækt, hi dɪklæə˞d ɪt wəz əv no jʉs tə wʒk ɑn ɪz foə˞m; ɪt wəz ðə most pɛstl̩ənt lɪtl̩ pis əv graund ɪn ðə hol kʌntrɪ; ɛvrɪθɪŋ əbaut ɪt wɛnt rɔŋ, ənd ˈwud go rɔŋ, ɪn spaɪt ɑv ɪm. hɪz fɛn(t)sɪz wə˞ kəntɪnjʊəlɪ fɔlɪŋ tə pisɪz; hɪz kau wud iðə˞ go əstre, ə˞ gɛt əmʌŋ ðə kæbɪdʒɪz; widz wə˞ ʃʊə˞ tə gro kwɪkə˞ ɪn ˈhɪz fil(d)z ðən ɛnɪhwæə˞ ɛl(t)s; ðə ren ɔlwɪz med ə pɔɪnt əv sɛtɪŋ ɪn dʒʌst əz i hæd səm aut-əv-doə˞ wʒk tə du; so ðət ðo ɪz pætrəmonɪəl əstet əd dwɪndl̩d əwe ʌndə˞ ɪz mænɪdʒmənt, ekə˞ baɪ ekə˞, əntɪl ðə˞ wəz lɪtl̩ moə˞ lɛft ðən ə mɪə˞ pætʃ əv ɪndɪən kɔə˞n ən pətetoz, jɛt ɪt wəz ðə wʒst kəndɪʃənd foə˞m ɪn ðə nebə˞hud.

27. Isolating sounds from words. A difficulty for the beginner is to learn to isolate the separate speech sounds from the combinations in which they occur in speech. The current spelling is deceptive because a single sound may be spelt with more than one letter, as **f** in *phonetics* **foˈnɛtɪks**, **p** in *happy* **hæpɪ**, **θ** or **ŋ** in *thing* **θɪŋ**, **ɜ** or **ɪ** in *journeyed* **dʒɜnɪd**; or two sounds spelt with one letter, as **ks** in *tax* **tæks**; or a sound with no letter, as **p** in *warm*()*th* **wɔɔ·mpθ**, **k** in *leng*()*th* **lɛŋkθ**, and **t** in *eigh*()*th* **etθ**. Some single sounds are always spelt with two letters, as **θ** or **ð** with *th*, and others usually so, as **ʃ** with *sh*, **tʃ** with *ch* (or *tch*). Hence it is necessary to consider the *sounds* and guard against deceptive spelling. It is best to sound the word without looking at the spelling and listen while repeating it. After the sound is perceived and pronounced separately, select the symbol which expresses it. Remember that the tables contain *all* the separate sounds; avoid confusing one sound with two, as **ŋ** with **ɪŋ**.[9]

Isolate and write the symbols for each sound in the following words, marking the accent of the plurisyllables: *speak, stopped, rabbit, cupboard, doubt, castle, talked, wished, robbed, dodged, healed, showed, snail, sinner, quick, school, liquor, extinct, accent, ached, except, singer, finger, running, thirsty, practice, Carlisle, exhibit, champagne, church, blackbird, shoemaker, dialect, dining-hall, knighthood, exhaust, quart, anguish, somewhat, buckwheat, everywhere, designate, fatality, ascertain, circumvent, momentum, landlord, losing, balloon, wardrobe, migrate, mouthful, township.*

28. Speech Sounds and Transition Sounds. In living language the speech sounds do not occur separately, but in continuous flow of sound from pause to pause. Thus in the phrase *the most of the time* **ðə most əv ðə taɪm** there are thirteen suc-

[9] A common mistake of elementary students is to confuse the *name* of a letter with its *sound*, transcribing, e.g., *elm* as **lm**, confusing the name **ɛl** with the sound **l**, or writing *Emma* as **mə**, confusing **ɛm** with **m**. The same blunder has led to pronouncing **waɪpə·z** for *Ypres*. It is a good exercise to write in phonetic symbols the names of the letters of the alphabet. What sounds of letters are identical with their names?

cessive **speech sounds,** each here represented by a phonetic symbol. But there is no break in utterance between them, not even between the words. For each of these speech sounds the speech organs are momentarily in a definite position. But the speech sounds are not the only physical sounds in the group. As the speech organs leave the sound **ð** in passing to the sound **ə,** they pass through many intermediate positions, the organs sounding all the time with a continuously changing sound. And so with every two successive speech sounds in the phrase. There are a very great number and variety of these intermediate sounds—just as many as the different possible combinations of speech sounds in actual speech. These are called **transition sounds,** or glides, the one leading up to a speech sound being the **on-glide,** and that leading away from it the **off-glide.** So most transition sounds between two speech sounds consist of an off-glide continuing into an on-glide. In some cases the glides are inaudible (see §§57 ff.), but between every two different speech sounds there is invariably an organic glide—a change in position of some speech organ, though the change may sometimes occur before the preceding speech sound is finished.

29. It is the speech sound that is **significant** in the practical use of language; that is, it serves to identify or distinguish meanings. Thus in the word *till* **tɪl** there is a very noticeable off-glide after the **t**—a puff of breath (**aspiration**). This is, however, not an essential part of the speech sound **t;** it is much less noticeable in the word *still* **stɪl,** and entirely absent in *outdo* **autdu;** but the sound **t,** in the actual use of speech, is the same speech sound in English in all three cases. That is why we notice and recognize the speech sounds: they are necessary to identify or to distinguish words (as *till* from *fill, sill, bill,* etc.), while we ignore the transition sounds because they are not significant. But in some other languages the **t** with the puff of breath and the **t** without it are two different speech sounds, distinguishing

words from one another. There the aspiration is a necessary part of the sound.

A transition sound may sometimes be identical with a significant speech sound. Thus *going* **goɪŋ** is often pronounced **ˈgowɪŋ** with a transition sound **w**. But though identical with the speech sound **w** as in *wide* **waɪd**, where it is significant and therefore necessary, in **go(w)ɪŋ** it is nonsignificant and unnecessary.

30. The Phoneme. Here the term "the same speech sound" is applied to a group of slightly varying sounds that are treated by speakers and hearers as the same speech sound. The term "speech sound" may also be used in the sense of one definite position or movement of the speech organs. In this sense, the **t** sounds in *till*, *still*, and *outdo* are different speech sounds, i.e., different organic formations. The difference here is due to the preceding **s** or the following **ɪ** or **d**. Likewise a **t** sound or any other speech sound may have numerous variations according to the sounds that precede or follow it or to varying conditions of utterance such as stress, pitch, length, syllable division, etc., and yet be commonly regarded and used as the "same sound." Thus the **l** sounds in *leave*, *fill*, *slow*, *daily* are each formed with slightly different actions or positions of the speech organs. By careful attention the differences can be heard. Yet they are all the "same sound" **l**. **Such a group, or family, of related sounds, varying solely because of varying phonetic surroundings or conditions, is called a phoneme.** When we speak of the "**l** phoneme," we refer to all the varieties of **l** sound in the language of a single speaker, or in a uniform dialect, that occur under different phonetic surroundings or conditions. So we can say that two such acoustically different sounds as the **z** in *busy* **bɪzɪ** and the *z* sound in *hens* **hɛnz** (almost like **s**; see §51) yet belong to the same **z** phoneme. For if the word *hens* **hɛnz** ended in a member of the **s** phoneme, it would then become the word *hence* **hɛns**.

31. We have seen, in the relation of transition sounds to speech sounds, that some sounds made by the speech organs are **distinctive** and others are not.[10] The same fact is to be observed in connection with the phoneme. For example, *sink* **sɪŋk** and *zinc* **zɪŋk** differ only by **s** and **z**; hence **s** and **z** are mutually distinctive sounds—they are the sole distinction between *sink* **sɪŋk** and *zinc* **zɪŋk.**[11] So *ink* **ɪŋk** becomes **sɪŋk** by adding **s,** or **sɪŋk** becomes **ɪŋk** by omitting **s,** which is therefore a distinctive sound; or *sing* **sɪŋ** becomes *sink* **sɪŋk** by adding **k,** and vice versa; hence **k** is a distinctive sound. But the **s**-like sound that ends the word *hens* **hɛnz** (a partly devoiced **z**), though to the ear very different from the **z** sound in *busy* **bɪzɪ,** is yet not a distinctive **s** sound, nor in spite of its **s**-like quality is it distinctively different from other **z** sounds; for the word *hens* **hɛnz,** though pronounced with artificial clearness with a full **z** sound like that in **bɪzɪ,** remains the same word *hens*. But the **s** of *hence* **hɛns** is a distinctive **s** sound as contrasted with the **s**-like **z** of *hens* **hɛnz** because substitution of it for the final sound of *hens* changes the latter to *hence* **hɛns.** It follows that members of the same phoneme are not distinctive in relation to other members of the same phoneme; only members of different phonemes are distinctive—can distinguish words.

[10] The elementary student is cautioned not to confuse the word *distinctive* with *distinct.* Look them up.

[11] In King Alfred's English **z** was not mutually distinctive with **s**; it was only a nondistinctive variety of **s** occurring between voiced sounds. Such pairs as *sink—zinc* could not then exist. Hence only the letter *s* was used to spell the two sounds, which belonged to the same phoneme. The same was true of the sounds and spelling of **f** and **v.** Since that time **z** and **v** have become distinctive speech sounds. The same is true of **ŋ** in *sing.* Till Early Modern English it was only a nondistinctive variety of **n** occurring before **k** and **g** sounds. When the **g** sound was dropped from *sing* (i.e., when **sɪŋg** became **sɪŋ**) then **ŋ** became distinctive and a separate phoneme. In Italian and Spanish **ŋ** is still a nondistinctive variety of **n** occurring only before **k** or **g.**

32. Thus, if the "clear" **l** sound of *leave* be put in the place of the "dull," or "dark," **l** of *well* (see §221), though the change may produce an old-style elocutionary effect, yet it will not change the word *well* to another word. The difference between the two varieties of **l** is not distinctive, or **phonemic**—does not make them members of different phonemes, and substitution of one for the other will not make a different word. On the other hand, **p** and **b**, though identical in two essential organic features out of three, belong to different phonemes, the difference (voice) being distinctive, or phonemic, in English, as in *peg* and *beg*. In some languages, however, **p** and **b** belong to the same phoneme, and cannot distinguish words as they do in English.[12]

Strictly, a phoneme is a group of variants of a speech sound as used by a single speaker; but the symbols here used can represent with sufficient exactness the phonemes of most of the varieties of English which there is occasion to refer to.

33. In contrast with a phoneme, a **diaphone** is a group of sounds, commonly regarded as the same sound, heard in the varying pronunciations of the same speech sound by different speakers. For example, the vowel sound in *made* varies with different speakers in different regions as **e, eː, eɪ, ɛɪ, ɛe, æɪ, aɪ,** etc. All these and other existing varieties constitute a diaphone.

The general principle of such transcription as is used in this book is to use **one symbol for each phoneme** with all its varieties, and in the main this is carried out. Each phonetic symbol represents a distinctive English sound, though each may have

[12] It is quite possible that the importance of the difference in single speech sounds as a means of distinguishing words from one another has been overestimated, especially by students of the phoneme. When words do come to be sounded alike, it appears to give users of a language no difficulty, for we have no trouble with the numerous homophones of English (see Sir Robert Bridges, "On English Homophones," *Society for Pure English Tract No. 2*). Context and circumstances are the chief aids in understanding the meanings of words that sound at all alike.

several perceptible nondistinctive varieties. (See §381.) Hence, in transcribing, it is the rule not to represent mere transition sounds or nondistinctive varieties of speech sounds. Thus in *going*, mentioned above, it is unnecessary to write the **w** often heard in it (**gowɪŋ**), but **goɪŋ** is the correct transcription. So the **j** sound often heard in words like *pedestrian* **pɪdɛstrɪ(j)ən** need not be represented. Here **w** and **j** are nondistinctive transition sounds. Likewise one need not indicate the nondistinctive variety of **l** as in *well*, for which a special symbol **ł** exists, for though it is noticeably different from the **l** in *leave*, it belongs to the same phoneme.

34. The phoneme principle likewise warrants the use of the symbols **i** and **u**, and **e** and **o** in words like *beet, boot; made, mode;* for although these sounds are often diphthongal **ɪi, uu, eɪ** (or **ɛɪ**, etc.), **ou** (**ɔu, ɜu**, etc.), yet in no case is either the simple vowel or the diphthong mutually distinctive. No English word containing **i, u, e,** or **o** would be a different word if **ɪi, uu, eɪ,** or **ou** were substituted. Hence it is correct in principle to transcribe such words as *see, do, may, made, go, mode* as **si, du, me, med, go, mod,** even though these vowels are often diphthongal both in America and England. They are often not so in America, and sometimes not even in standard British.[13]

35. On the other hand, in recording dialects for historical or geographical study it is often of great importance to record as many nondistinctive variants as possible, since they often reveal linguistic facts and changes that would not appear in a strictly phonemic transcription, and would thus go unrecorded, though perhaps of great importance to the history of the language and the relations of dialects. For example, a phonemic transcription of American dialects would not record the variation in various isolated parts of the United States and Canada of the diphthongs **aɪ** and **au** before voiceless and voiced sounds (since they

[13] See Fuhrken, §§26, 74, 93 f.

all belong to one phoneme, respectively) which suggests interesting relations to Scottish speech and throws light on the historical development of the Middle English simple vowels **iː** and **uː** into the corresponding modern diphthongs **aɪ** and **aʊ**. As seen above (footnote 11) nondistinctive and transition sounds may become distinctive; hence for historical purposes it may be important to record them. The English **tʃ** and **dʒ** sounds are instances in which the principal acoustic feature was once a mere off-glide, a transition sound that has now become distinctive and cannot be omitted without changing the sound to another phoneme. So it is convenient and useful to depart somewhat from a phonemic transcription to show, e.g., the frequent difference between standard American and British speech in the vowels **e, o** and **eɪ** (**ɛɪ**, etc.), **oʊ** (**ɜʊ**, etc.), or especially between the pronunciation of standard English in Scotland and in South England.[14]

[14] Transcription which uses different symbols to represent nondistinctive and diaphonic varieties of the same phoneme is called **phonic** transcription. In such a transcription the acoustic values of the symbols must be understood beforehand, either by organic description, or, better, by a phonograph record of the sounds.

THE ORGANS OF SPEECH

36. The sounds of speech are produced by breath forced from the lungs and modified by the vocal organs. These are:

(1) The **Larynx,** or voice-box. This is an enlargement of the upper end of the windpipe that appears on the outside as the "Adam's apple." It contains the **vocal cords,** so called. They are not cords, but a pair of folds in the mucous membrane containing ligament and muscle fiber and extending inward from the right and left walls of the larynx somewhat like ledges, with their inner, free edges running from front to back. A more descriptive name is **vocal lips.** They are also attached in front to the front wall of the larynx, and at the back to two swinging, gate-like cartilages called the **arytenoids** (ˌæɚˈɪtinɔɪdz). The opening between the vocal lips is called the **glottis,** the part from the arytenoids to the front being the longer and called the **cord glottis,** or glottis proper, and the shorter part between the cartilages, the **cartilage glottis,** or **whisper glottis.**

Each glottis can be opened and closed independently. When the cord glottis is wide open, the air passes freely through as in ordinary breathing. When the cord glottis is lightly closed, breath forced out sets the edges of the cords into musical vibration, or **voice.** This is heard in all the vowel sounds and in the voiced consonants, such as **v, z, d.** When the cord glottis is firmly closed and the cartilage glottis is slightly open, breath forced out produces by friction the **whispering voice.** This is heard by whispering any of the vowels or voiced consonants, and is different from the fricative sound heard in the voiceless consonants **f, s.** When both cord glottis and cartilage glottis are firmly closed the breath is prevented from passing out. When they are closed at the end of a sound, or just before the beginning of one, there is produced what is called the **glottal stop.**

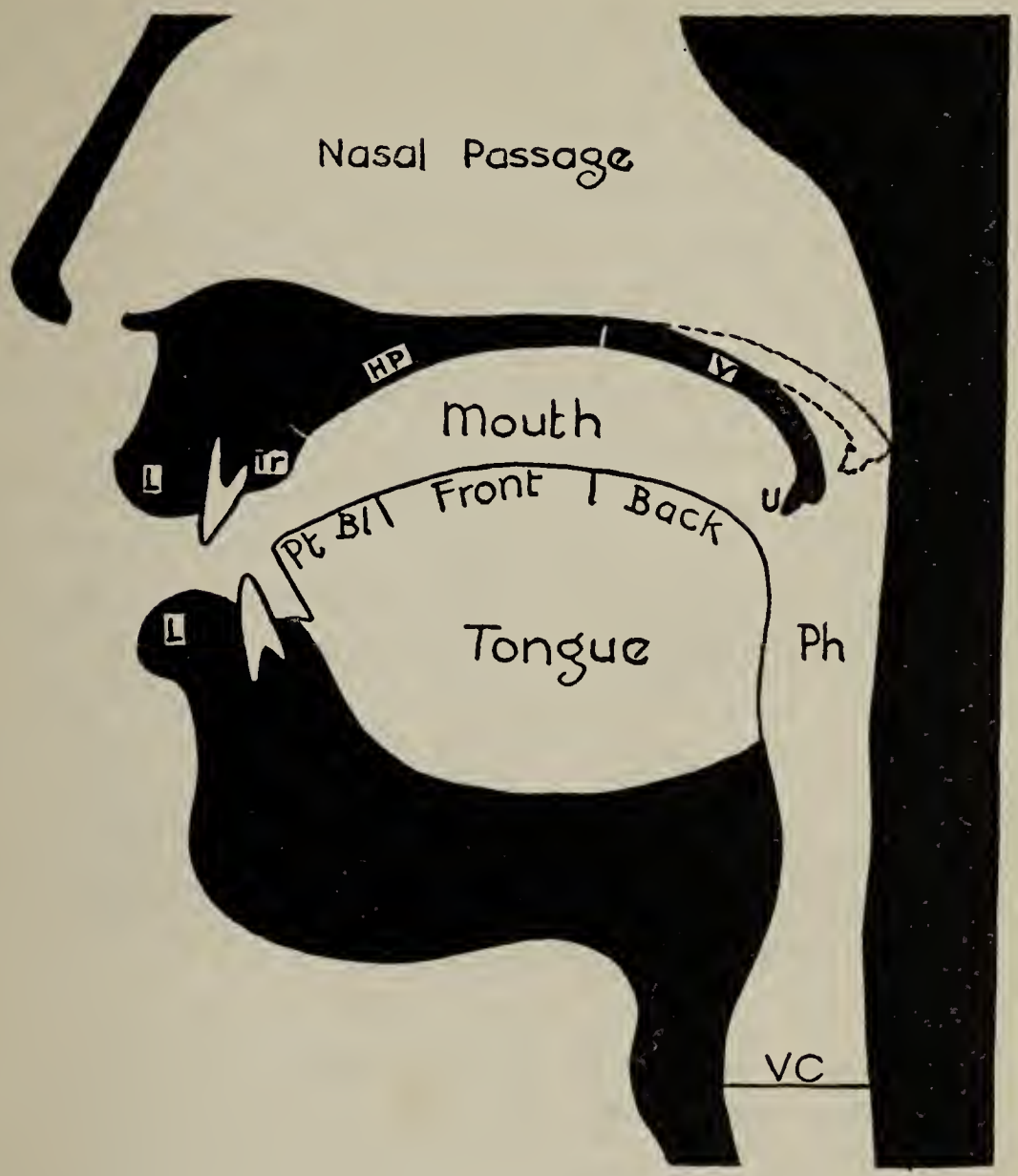

FIG. 2.—Conventionalized Diagram of the Speech Organs.
LL=Lips. Pt=Tongue Point. Bl=Tongue Blade.
Tr=Teethridge. HP=Hard Palate. V=Velum (soft palate): black: lowered, or open; dotted: raised, or closed.
U=Uvula. Ph=Pharynx. VC=Vocal Cords.

This is a regular speech sound of some languages, but not in standard English. For its occasional occurrence in English, see §56.

(2) The **Tongue.** This very flexible muscle is attached to the lower jaw so that its whole body moves up and down with the jaw. The parts of the tongue referred to are: (a) the **point,** or

tip; (b) the **blade,** including the point and a little back of the point; (c) the **front,** from the blade back to about the middle; and (d) the **back,** the remaining part back of the middle.

(3) The **Teeth**—upper and lower.

(4) The **Teethridge,** or **Alveoli** (æl'viəlaɪ). The upper teethridge is more important in speech than the lower.

(5) The **Lips.**

(6) The **Hard Palate**—the roof of the mouth from the teethridge back to about the middle.

(7) The **Soft Palate,** or **Velum** ('viləm), from the middle to the back end of the roof of the mouth. The velum can be raised to the back wall of the throat where it enters the nasal cavity, so as to shut off the passage of air into the nasal cavity.

(8) The **Uvula.** This is a soft appendage hanging down from the back end of the velum. It is of little use in standard English but is used in some other languages.

(9) The **Nasal Cavity.** This rises from the back of the throat over the velum, is divided from front to back in the nose by the septum, and terminates in the nostrils.

The Organic Formation of the Consonants

37. In the following brief description of the organic formation of the consonants, the four movable speech organs are mentioned in order from front to back: (1) **Lips,** (2) **Tongue,** (3) **Velum,** (4) **Vocal Cords.** The four possible contacts or approaches of the tongue are to the (1) **Teeth,** (2) **Teethridge,** (3) **Hard Palate,** (4) **Velum.** Outward breath-pressure is assumed in all cases. When not mentioned, the lips (open) and tongue are in neutral resting position.

The Stops

p Lips closed, velum closed, vocal cords apart (silent). **Voiceless lip stop.**

b Lips closed, velum closed, vocal cords vibrating (sounding). **Voiced lip stop.**

t Tongue point on teethridge with sides touching, velum closed, vocal cords apart. **Voiceless tongue-point stop.**

d Tongue point on teethridge with sides touching, velum closed, vocal cords vibrating. **Voiced tongue-point stop.**

k Tongue back on velum with sides touching, velum closed, vocal cords apart. **Voiceless tongue-back stop.**

FIG. 3.—Positions for **t, d, l, n.**
Dotted velum = **t, d, l.**
Black velum = **n.**

FIG. 4.—Positions for **k, g, ŋ.**
Dotted velum = **k, g.**
Black velum = **ŋ.**

g Tongue back on velum with sides touching, velum closed, vocal cords vibrating. **Voiced tongue-back stop.**

ʔ Glottis firmly closed. **Glottal stop.**

The Fricatives (ˈfrɪkətɪvz)

f Lower lip on upper teeth, velum closed, breath fricative between teeth and lip, vocal cords apart. **Voiceless lip-teeth fricative.**

v Lower lip on upper teeth, velum closed, breath fricative between teeth and lip, vocal cords vibrating. **Voiced lip-teeth fricative.**

θ Tongue blade on points of upper teeth, velum closed, breath fricative between tongue and teeth, vocal cords apart. **Voiceless tongue-blade-teeth fricative.**

ð Tongue blade on points of upper teeth, velum closed, breath fricative between tongue and teeth, vocal cords vibrating. **Voiced tongue-blade-teeth fricative.**

s Tongue blade near teethridge with narrow chink over the point, velum closed, breath fricative in narrow jet through

FIG. 5.—Position for **j**.

FIG. 6.—Position for ʃ.

the chink and against the upper and lower teeth, vocal cords apart. **Voiceless tongue-blade alveolar fricative.**

z Tongue blade near teethridge with narrow chink over the point, velum closed, breath fricative in narrow jet through the chink and against the upper and lower teeth, vocal cords vibrating. **Voiced tongue-blade alveolar fricative.**

ʃ Tongue blade farther from teethridge than for **s** and more spread laterally, tongue front raised nearer to hard palate, velum closed, breath fricative in a broad stream over blade and front, vocal cords apart. (Lips sometimes protruded.) **Voiceless tongue-blade and -front alveolopalatal (æl|vi-əlo|pælət|) fricative.**

ʒ Tongue blade farther from teethridge than for **z** and more spread laterally, tongue front raised nearer to hard palate, velum closed, breath fricative in a broad stream over blade and front, vocal cords vibrating. (Lips sometimes protruded.) **Voiced tongue-blade and -front alveolopalatal fricative.**

h Mouth shaped for following sound, velum closed, vocal cords closing to position for voice with simultaneous breath pulse, breath slightly fricative on vocal cords. **Stressed glottal fricative.**

The Affricates (ˈæfrɪkɪts)

tʃ Tongue blade on teethridge farther back than for **t**, then withdrawing through position for **ʃ**, velum closed, breath first stopped and then fricative, vocal cords apart. (Lips sometimes protruded.) **Voiceless tongue-blade and -front alveolopalatal affricate.**

dʒ Tongue blade on teethridge farther back than for **d**, then withdrawing through position for **ʒ**, velum closed, breath first stopped and then fricative, vocal cords vibrating. (Lips sometimes protruded.) **Voiced tongue-blade and -front alveolopalatal affricate.**

The Sonorants (səˈnoɚənts)

m Lips closed, velum open, vocal cords vibrating. **Voiced lip nasal.**

n Tongue point on teethridge with sides touching, velum open, vocal cords vibrating. **Voiced tongue-point alveolar nasal.**

ŋ Tongue back on velum with sides touching, velum open, vocal cords vibrating. **Voiced tongue-back velar nasal.**

l Tongue point on teethridge with sides free, velum closed, vocal cords vibrating. **Voiced tongue-point alveolar lateral.**

The Glide Consonants

w Lips closely rounded, tongue back raised toward velum (position for **u**), lips and tongue gliding to position for the

following vowel, velum closed, vocal cords vibrating. **Voiced labiovelar (ˈlebɪoˈvilə˞) semivowel.**

j Tongue front near hard palate (position for **i**), gliding to position for the following vowel, velum closed, vocal cords vibrating. **Voiced tongue-front palatal semivowel.**

r Tongue sides against molars, point raised toward hard palate, body contracted laterally (position for the vowel **ɜ**),

FIG. 7.—Position for **r**.

gliding to following vowel, velum closed, vocal cords vibrating. **Retroflex[15] tongue-point and -blade semivowel.**

38. Consonants Grouped by Places of Articulation. The dash is between approaching or touching organs.

1. Lips	**p, b, m**
2. Lips, and tongue back—velum	**w, (h)w**
3. Lip—teeth	**f, v**
4. Tongue blade—teeth	**θ, ð**
5. Tongue point—teethridge	**t, d, n, l**
6. Tongue blade—teethridge	**s, z**

[15] The term *retroflex* is here used loosely of varying degrees of tongue-point elevation.

7.	Tongue blade and front—teethridge and palate	ʃ, ʒ, tʃ, dʒ
8.	Tongue point—palate	r
9.	Tongue front—palate	j
10.	Tongue back—velum	k, g, ŋ
11.	Glottis	h, h(w)

39. Stops, Fricatives, Affricates, Sonorants, and Glides. From the foregoing descriptions of the manner of forming the consonants, the groupings according to the similarity of organic formations become evident. The six consonants **p, b, t, d, k, g** are the **stops**—consonants formed by complete stoppage of the breath stream by means of the velum and the lips or the tongue. The glottal stop, not a regular English consonant, is formed by stoppage at the glottis.

40. The nine **fricatives f, v, θ, ð, s, z, ʃ, ʒ, h** are characterized by audible and essential friction of the breath upon the speech organs, which are narrowed toward each other sufficiently to make the impact of breath upon them heard.

41. The two **affricates tʃ** and **dʒ** combine the features of the stops and the fricatives, beginning with a complete stoppage of the breath and ending with a fricative sound. The essential characteristic of an affricate is a stop followed by a homorganic fricative; i.e., a fricative formed by a relatively slow opening of the speech organs from the position taken by them to stop the breath. Other similarly formed sounds, as **tθ** (**etθ**), **tr** (**traɪ**), **ts** (**gɛts**) are not true affricates in English; that is, though organically similar, they are not *used* in English as independent speech sounds. See further under **tʃ, dʒ** in *Consonants in Detail.*

42. The sonorants **m, n, ŋ, l** in English depend for audibility upon voice, which is the only actual physical sound heard in them. If they are made voiceless, they become inaudible unless they are turned into fricatives by increased force of breath. They are not normally completely voiceless in English. See §49.

The acoustic identification of the sonorants depends, like that of the other consonants, upon the place of articulation.

43. The glides **w, j, r** are formed by rapid movement of lips or tongue away from the position of one of the vowels **u** (or near it), **i** (or near it), or **ɜ** (or near it). Their audibility depends upon voice, and their acoustic identification upon the effect of the movement on the sound of the voice. See §§71, 224 ff.

44. Voiceless and Voiced Consonants. Since all English consonants except **h** are articulated in the mouth, they may be formed either with or without the vocal cords vibrating.[16] In some cases the sound of the voice is mingled with other noises of the consonant, so that at first it may be difficult to hear whether a consonant is accompanied by voice or not. One test is to stop the ears while sounding alternately such pairs as *fife* and *five*, prolonging the last sound. Another test is to rest the finger on the outside of the larynx, where the vibration of the vocal cords can be felt. In holding the sound of **f** by itself observe that the only thing heard is a fricative rustling of the breath past the lip and teeth. In sounding **v** the same friction is heard with the sound of the voice added, the vibration of the vocal cords.

45. In the list of consonant symbols test all the consonants to see whether they are voiceless or voiced, and then arrange in pairs those consonants that are made with the same speech organs except the vocal cords; i.e., pairs of corresponding voiceless and voiced consonants.

What sounds in the list have no corresponding voiceless

[16] Voiceless consonants are also called *breathed* (**brɛθt**), an adjective formed by Sweet from the noun *breath* (**brɛθ**) just as *voiced* is formed from the noun *voice*. Kruisinga (*Le Maître Phonétique*, Avril–Juin, 1934, p. 48) points out that it is a blunder to confuse the word and its application with the past participle *breathed* (**briðd**) of the verb *to breathe*. On the whole, *voiceless* seems a better term than *breathed* (**brɛθt**). The term *unvoiced* is bad because it also means "devoiced."

ones? What voiceless one has no corresponding voiced? Test the vowels for voice, and then find the etymology of the words *vowel*, *vocal*, and *voice*.

46. Find pairs of words, such as *peg—beg*, for every pair of voiceless and voiced consonants, in which one word of the pair differs from the other only by corresponding voiceless and voiced sounds; i.e., in which the voiceless and voiced sounds are mutually distinctive. Write the pairs in phonetic symbols.

The sounds **hw** and **w** are not strictly such a pair of voiceless and voiced consonants, though they are used in much the same way to distinguish words, as *where—wear*. As usually pronounced in America **hw** is **h** followed by **w** (remember that **h** always assumes the mouth shape of the following sound). Jespersen considers this also the commoner form of the sound of those in Southern England who distinguish between *whales* and *Wales*. A true voiceless **w** (IPA ʍ) with fricative sound added is also used by some speakers. In ʍ the friction of air is in the mouth, and in **hw** it is in the glottis (i.e., it is **h**). See **w** and **hw** in *Consonants in Detail*.[17]

47. The sound **h** is sometimes voiced in English between voiced sounds, as in *behind*. The vocal cords separate a trifle for the **h**, but not enough to stop vibrating. But voiced **h** is not a distinctive sound in English. It is a member of the voiceless **h** phoneme.

48. **m** is voiceless in certain common utterances not usually

[17] It is because **hw** and voiceless **w** are often interchangeable, that **hw** is listed as one symbol in the tables of phonetic symbols. Otherwise they should be listed separately only as **h** and **w**, which can be combined like other sounds such as **tr**, **sl**, etc. On the other hand, the symbols **tʃ** and **dʒ** stand for single speech sounds. Whatever their composition, they function in English as single speech sounds, and single symbols would be better for them. These symbols were devised before the sounds were so well understood as now. The symbols are often ligatured, and may well be written so. See the detailed description of the sounds.

regarded as real words, but often with such meanings as "yes," "no," etc. A devoiced consonant that is usually voiced is shown by a small circle below its symbol, as **l̥**, **m̥**. Try to pronounce the following: **m m̥ m, m̥ m ʔ m.** Try similar ones with voiced and voiceless **n.** Represent in symbols the sounds you think are meant by the spelling "*Humph!*", "*Eh?*".

49. The sonorants and the glides are often devoiced at the beginning of their sound when preceded by certain voiceless consonants. Thus in **smɔl, sno, slo, twaɪs, hjudʒ, traɪ,** the **m, n, l, w, j,** and **r** are voiceless at the beginning and voiced at the end. But none of these voiceless forms are distinctive in English. Though really very different acoustically, the **r** in **traɪ** is "the same" **r** as in **raɪ.** Hence the difference is not noticed and need not be expressed. The fricative **r** of **traɪ** belongs to the same phoneme as the glide semivowel **r** of **raɪ.** But in Welsh there is a voiceless fricative **l** (IPA **l̥**) which distinguishes words from those with voiced **l.** This **l̥** is heard in Welsh place names, as *Llangollen* **l̥anˈgɒl̥ən.**[17a]

50. Observe that the voiceless stops have no sound at all while the tongue or the lips are in contact; they are therefore **silent speech sounds,** but just as real and useful as if they had sound. Their silence is "heard" as clearly as other sounds. For fuller explanation, see §54.

The voiced stops have a brief sound of voice during the contact. How can you explain the fact of breath vibrating the vocal cords but not escaping from the mouth or nose?

The voiceless fricatives have the sound of friction only, and the voiced fricatives have the combined sound of friction and of voice.

The sonorants and the glides have no other sound than voice. If they are made voiceless, either there is silence, or the in-

[17a] Welsh voiceless **l** is strongly fricative. For more exact transcription a special IPA symbol is used (**l** with looped cross-bar).

creased breath due to the opened glottis causes friction in the mouth, as in the voiceless fricatives.

51. We make the same distinction between voiceless and voiced sounds in whispering as in speaking aloud. But for the voiced sounds we use, instead of the speaking voice, the whispering voice, which is made by closing the cord glottis altogether and forcing the breath through the cartilage glottis. See §36 (1). The whispering voice can easily be heard and felt by whispering vowels or voiced consonants. Voiceless sounds are alike in whisper and loud speech.

When the voiced fricatives **v, ð, z, ʒ, dʒ** are final and not followed by voiced sounds, as in **liv, smuð, pez, ruʒ, rɪdʒ,** in ordinary speech the last part of the fricative is whispered, and at the very end is often quite voiceless. Compare the sound of **z** in *it pays* **ɪt pezs** with that in *it pays him* **ɪt pez ɪm.** The same is true to some extent with initial voiced fricatives. When a voiceless sound, or none, precedes, the first part of the fricative is devocalized: cf. **fvɛəɪ gʊd** and **ðæts fvɛəɪ gʊd** with **hiz vɛəɪ gʊd.** When voiced fricatives are final after a voiced consonant, they are often wholly devocalized: cf. *pays* with *fills* or *rouge* with *ridge.* In very distinct utterance this devocalization of final voiced fricatives is avoided by some speakers.

52. Oral and Nasal Consonants. Begin to make the sound **b** without allowing the lips to separate. Then while continuing the effort, allow the breath to pass out through the nose. This results in the sound of **m.** When breath passes through the nose with the mouth passage shut off **by the** lips or the tongue, the velum is lax and hangs away from the back of the upper pharynx. When the velum is drawn up to contact with the back of the upper pharynx, the breath is prevented from passing through the nose and is forced out through the mouth. When the velum is lax, leaving the passage through the nose open, breath may pass through nose and mouth at the same time, but ordinarily in

speaking it passes through only one at a time. Test the other consonants of the list and determine which of them are nasal.

Nasalized vowels are made through the mouth, but with the nasal passage open for some breath to pass out, and also so as to produce resonance from the nasal cavity. Nasalized vowels are regular in French, but are not ordinarily used in English.

53. Stops. The stops need more particular notice. In pronouncing the voiceless stop **p** in *pay*, there is an explosive sound of breath (its aspiration; see §29) between the stop and the vowel just as the lips separate. Likewise in the **t** of *too*, as the tongue point leaves the teethridge, and in the **k** of *key* just as the tongue back leaves the velum. A similar explosive sound can be heard in *stop 'em* **stɑp m̩,** for which the lips do not separate but the velum opens and the explosion, less marked, is made through the nose. So in *battle* **bætl̩** the tongue point remains on the teethridge while the air bursts out at the sides of the tongue; and in *cotton* **kɑtn̩** the tongue point remains on the teethridge while the breath, by sudden opening of the velum, escapes through the nose. In *I can go* **aɪ kŋ̩ go** the tongue back remains on the velum, the velum opens, and the explosion takes place through the nose. These various manners of explosion after **p, t, k** are varieties of especially prominent transition sounds (§28)—they are not the speech sounds **p, t, k** themselves, which often occur without them with no loss of their practical use in living speech. These transition sounds are absent, e.g., from **p** in *jump back* **dʒʌmp bæk,** from **t** in *outdo* **autdu,** and from **k** in *background* **bækgraund,** yet the **p, t,** and **k** are plainly present.

54. In the three last examples the **p, t,** and **k** are entirely silent from the end of the preceding sound to the beginning of the following sound. In these cases we have speech sounds which are not *sounds* from the point of view of physics; but they make as definite an impression on the speaker and the hearer as if they

were accompanied by noise, or physical sound. The same silent speech sounds can be heard when **p, t, k** are pronounced at the ends of words before a pause, as in **sæp, sæt, sæk.** In these cases the **p, t, k** are recognized by the preceding transition sound that leads up to them till the contact of the lips or the tongue is made. This initial contact for any sound that has contact is called the **closure,** or **occlusion,** and the end of the contact is called the **opening,** or **release.**[18] In **sæp, sæt, sæk** the closure is evident to the ear by the sudden cutting off of the preceding vowel **æ,** and the acoustic character of this sudden closure reveals whether the following stop is **p, t,** or **k.**[19] The closure is not heard when the stops are initial, as in **pe, tu, ki.** Between vowels both closure and release are evident, as in *copy, duty, seeking.*

Stops are also called plosives, or explosives, because the explosive release is often a prominent mark of the presence of these sounds. But the closure and release are the transition sounds, not the speech sounds.

55. When the stops are voiced (**b, d, g**) in similar surroundings to those named above for **p, t, k,** as in **be, du, go, rab m̩, sʌdn̩, dɔg ŋ gʌn,** the explosion is less marked and is accompanied by voice.[20] It, too, may be absent, as in **kab paɪp, saɪdtræk, dɔg kɑɔ·t,** or when **b, d,** or **g** ends a phrase or sentence. When special effort is made to explode final voiced stops, a brief vowel **ə** is heard after them. In mistaken efforts to speak clearly

[18] The same terms are also sometimes applied to sounds that have only narrowing, as **s, z.**

[19] Instructive experiments can be made by pronouncing the words given while the mouth of the speaker is concealed from the listener.

[20] Often the voice does not begin till the moment of the release of the voiced consonant, the consonant itself being without sound of voice. But such voiceless **b, d, g** sounds still are members of the **b, d, g** phoneme, respectively, and are distinguished acoustically from **p, t, k** by the difference in the manner of release. There are also organic differences, as in the position of the glottis.

radio announcers sometimes use such pronunciations as **hi dɪdə, hi traɪdə tu rɑbə,** etc.

56. The Glottal Stop. Since this is formed by the firmly closed glottis, it can only be voiceless and silent, though the transition sound before or after it can be either voiceless or voiced. Its presence is evident, like that of **p, t, k,** either by the sudden cutting off of the preceding sound or the explosive release and transition to a following sound, especially a vowel. This explosive release is heard in the common cough. In some languages it is a distinctive speech sound, as in Semitic, where it has a letter to spell it, and in Danish. It also occurs regularly in standard German before initial vowels of accented syllables, though not, except rarely, as a distinctive speech sound.[21]

Though not a distinctive speech sound nor of regular occurrence in English, the glottal stop occasionally occurs in both British and American standard speech. It is used before a vowel at the beginning of a word or syllable for special emphasis, as **hiz ʔɔlwɪz let; ɪts ɪnʔædəkwɪt;** in public speaking to give a staccato effect of clearness; and frequently to make an easy or clear transition from a final vowel to an initial one, as **əmɛəˑɪkə ʔən fræns, edə ʔæn,** etc., where speakers of some types of English are apt to insert an intrusive **r** (see §241).

In some local British dialects, as that of Glasgow, the glottal stop occurs regularly as a substitute for the stops, especially **t** and **d,** as in **gɛʔ ɪʔ** for **gɛt ɪt, lɛʔər,** for **lɛtər,** etc.

57. Combinations of Stops. When stops are followed by other stops, as in **ækt,** only the closure of the first and the opening, or release, of the second are heard. In **ækt** the tongue back and the velum come into contact, making the closure for **k,** and then before the tongue is released from the velum, the point

[21] Cf. Prokosch, *Sounds and History of the German Language,* N. Y., 1916, p. 34, §36.

makes contact with the teethridge for **t**, so that no release for **k** and no closure for **t** are heard, though they both occur silently. The tongue acts likewise but in reverse order in **tk** of **naɪtkæp.** Follow step by step the action of the lips and the tongue in the following **combinations of voiceless stops: æpt, nʌtpɪk, ʌpkip, rɑkpaɪl.** Do so likewise with these combinations of **voiced with voiced stops: sɑbd, rɛdbɜ̧d, hɛdgɪɚ, bægdæd, rʌgbɪ, kræb græs.**

58. When a **voiceless stop** is followed by a **voiced stop,** as **pd** in **læp dɔg,** we likewise hear only the closure of the first (**p**) and the release of the second (**d**), but in this case the voice begins somewhere in the second stop (sometimes just at the release). Follow the process in **ʌpgred, sɛtbæk, fæt gus, brɪkbæt, bæk doɚ.**

59. When **voiced stops** are followed by **voiceless,** the first closure and the second release only are heard, as in the preceding, but the voice sounds during the first, and then becomes silent at the beginning of the second, or a little after its closure. This may be observed in **bɑbtel, sʌbklæs, tædpol, mædkæp, mægpaɪ, wægtel.**

60. In the **homorganic stops, voiceless+voiced (pb, td, kg)** and **voiced+voiceless (bp, dt, gk),** the situation differs in that the speech organs of the mouth keep the same contact from the closure of the first to the release of the second, so that there is only **one closure and one release,** instead of the two closures and two releases of the foregoing groups, in which only one of each was heard. The voice begins or ceases in the midst, as in the other combinations of voiceless and voiced stops. Observe the examples **skræpbuk, kɑb paɪp; autdu, saɪdtræk; bækgraund, dɔgkɑɚt,** with lip contact, tongue-point contact, and tongue-back contact.

61. Lengthened Consonants. Consonants, like vowels, differ in length in English. For example, the **l** of *build* **bɪlːd** is longer

than that of *built* **bɪlt**, **m** is longer in *dumb* **dʌmɪ** than in *dump* **dʌmp**, and **n** is longer in *hens* **hɛnɪz** than in *hence* **hɛns**. It is likely that consonant length, like vowel length, differs in England and America. The subject is complicated and as yet little investigated. Reliable results can come only from instrumental experiment. Important work has been done by E. A. Meyer, G. E. Fuhrken,[22] and others, chiefly for British speech, but much remains to be discovered, especially in America. The length of sounds not only in separate words, but in connected speech of different styles and by different persons, needs investigation. The subject is very important for dialect study and the history of sound changes, but fortunately not so important for the practical study of speech, in America, at least.

For it is doubtful whether length of consonants by itself is ever distinctive in English. Possibly the length of **n** in *hens* **hɛnz** is its chief acoustic difference from *hence* **hɛns**, for the final **z** and **s** of these words are very much alike to the ear. Perhaps if the word *hens* were pronounced with as short a **n** as in *hence*, the two words would be confused, if they occurred in contexts where confusion of meaning would be likely.

62. Doubled Consonants. Consonants represented by double letters in present English are seldom double, except in words joined in compounds and when contiguous in speech, and occasionally when prefixes or suffixes are added, as in *unknown* **ʌn-non**, *wholly* **hol-lɪ**, *solely* **sol-lɪ**, *meanness* **min-nɪs**, etc. Most words with **doubled letters but single sounds**, as *happy* **hæpɪ**, *little* **lɪtl̩**, *follow* **fɑlo**, are merely relics of a time in Middle English when the consonants were really long or double, being shortened later with the old spelling retained.

When **voiceless stops** are combined, as in *hop pole* **hɑp-pol**,

[22] E. A. Meyer, *Englische Lautdauer*, Uppsala, 1903: G. E. Fuhrken, *Standard English Speech*, Cambridge (Eng.), 1932. See §84.

coattail **kot-tel,** *bookcase* **bʊk-kes,** the lips or the tongue are in contact from the closure of the first consonant to the release of the second, with a moment of silence between. During this silence, after the closure and before the release, Stetson[24] has shown that there is a fall and then a rise in breath pressure due to a chest pulse which marks the division between the syllables and the beginning of a second consonant. The double is also made evident to the ear by the perceptible interval between the closure and the opening of the double consonant.

When the abutting consonants are **voiced stops,** as in *grab bag* **græb-bæg,** *headdress* **hɛd-drɛs,** *big game* **bɪg-gem,** the voice usually continues from closure to release, with a slight weakening in the middle that likewise indicates the syllable boundary, followed by the pulse of the second consonant.

The situation is similar when **fricatives** or **sonorants** are combined, as in **hæf-fʊl, liv-vekənt, boθ-θɪŋz, wɪð-ðɪs, pɜs-strɪŋ, hɪz-zil, wɑʃ-ʃip, fil-laɪk, hom-med, pɛn-naɪf,** though the syllable division is not so sharp as with stops.

63. In some cases, however, Stetson's experiments seem to show that the consonant in such combinations is merely lengthened, the impression of doubling being given by the perceptible separation of the closure and the release, and the fact that there are two syllables.

From the point of view of the continued contact of the lips or the tongue, such abutting consonants as in *coattail* **kot-tel** and the others are lengthened consonants; from the point of view of the syllable division with a chest pulse between the closure and the opening, they are double. Both points of view are suggested by doubling the symbol with a connecting hyphen between (**hɑp-pol,** etc.).

64. When the abutting consonants are **affricates,** which con-

[24] R. H. Stetson, *Motor Phonetics* (in *Archives Néerlandaises de Phonétique Expérimentale*), La Haye, 1928, pp. 67 ff.

sist both of a contact and a fricative narrowing, both parts must be repeated in order to retain the identity of the two consonants, which, if treated like the others, would become either **t-tʃ, d-dʒ** or **tʃ-ʃ, dʒ-ʒ.** Hence they are sounded as stop-fricative-stop-fricative, the tongue passing from the first stop position to the narrowed fricative position, and then to the second stop position without opening to the full open vowel position, as it does after the second fricative position; as in **dʌtʃ-tʃiz, dʒɔɚdʒ-dʒonz.**

65. Consonants that do not end words, as **h** and the glides **w, hw, j, r,** and those that do not begin words, as **ŋ** and **ʒ** (except rarely), are not thus doubled. When such combinations occur as *how weak* **hau-wik,** *why yes* **waɪ-jɛs,** *far-reaching* **fɑɚ-ritʃɪŋ,** we have the abutting of the final **nonsyllabic vowel** of a falling diphthong (**au, aɪ, ɑɚ**) with the initial **nonsyllabic glide consonant** of a rising one (**wi, jɛ, ri**).[25]

66. Doubled consonants are often **distinctive,** as in **aɪ du, aɪd-du; aɪ o nʌn, aɪ on-nʌn; aɪm aɪk, aɪm-maɪk;**[26] **tɑp ʌp, tɑp-pʌp; wɪð ə mæn, wɪð-ðə mæn; ʌnemd, ʌn-nemd.** Cf. also **ðɪs-sə faɪn de.** But such abutting double consonants do not show that consonant length is distinctive in English; for the consonants are not merely lengthened but are doubled; and it is rather the syllable division that is distinctive in the practical use of language. Syllabic and nonsyllabic consonants are distinctive for the same reason; as in *batlet* **bætlɪt** and *battle it* **bætl̩ ɪt;** *ordnance* **ɔɚdnəns** and *ordinance* **ɔɚdn̩əns;** *Stop, Mike!* **stɑp maɪk** and *Stop 'em, Ike!* **stɑp m̩ aɪk.** The difference is perceived by the extra syllable, though it is true that length of the consonant (not doubleness) is the cause of the syllabicness. The same consonants (but not in the same environment) can, however, be

[25] The word *diphthong* is used in this book to include such consonant-vowel combinations as **wɑ, jɑ, ju, rɑ,** etc.

[26] Stetson, p. 67.

long without being syllabic, as in **fɪlː, fɪdl̩; bʌnɪ, bʌtn̩;** *Ohm* **omɪ, opm̩.**

When it does not give a wrong meaning, doubled consonants are often made single, as **pɛnaɪf, ɪmətɪəɪəl, ɪnet;** and in *wholly*, often pronounced **holɪ** in spite of the homophone *holy* **holɪ,** the latter not being often used in the same situation in the sentence.

67. Vowels and Consonants. The key to the meaning of **vowel**[27] as formed by the speech organs is **shape,** and as heard by the ear, free **tone** of a certain **resonance.**[28] The key to the meaning of **consonant** is, organically, **contact or narrowing** and acoustically, **dampening of sound.** The dampened sound may vary from a sonorous sound almost as full as a vowel to complete silence. The shape of the whole mouth and throat cavity is significant for the vowel; for the consonant the determining (though not the exclusive) feature is contact or opposition of some particular parts of the speech apparatus, as lips, teeth, tongue, palate, velum, glottis. Vowels and consonants have many features in common. It is the predominating features that are significant for each class by itself. These predominating features determine the practical use of the vowel and consonant sounds in actual speech.

68. A vowel is a form of **musical tone.** A voice tone is a complex of sets of regular vibrations of the vocal cords of different rapidity, or frequencies. These consist of a **fundamental** and of **overtones.** The fundamental is the lowest-pitched set of regular vibrations (lowest frequency) in the tone, and the overtones (partials) are several sets of vibrations of higher pitch (greater frequency) in harmony with the fundamental. The mouth and

[27] The definitions of vowel and consonant are based on the author's type of General American.

[28] The term *resonance* is here used, not in its general sense of resounding power or sonorousness, but in its technical sense of specific tone quality, as defined above.

throat cavity as shaped for each particular vowel has, like any cavity, a certain **natural resonance,** or "echo." If one hums a tune in an empty room, one of the notes "rings in one's ears." This is the note having the pitch that agrees with the natural resonance of the room. In a similar manner the mouth cavity, shaped with the aid of the tongue and lips for a given vowel, **reinforces those partials** of the voice tone which best fit its particular shape. This gives the resonance of the vowel, the characteristic **quality** that identifies it. For some vowels the mouth and throat are divided by the tongue into two connected compartments, each with its characteristic resonance. Such vowels then have a double characteristic, or resonance.

69. The fundamental tone may be changed in key (pitch), but the mouth cavity, shaped for the same vowel, will still select and reinforce partial tones of the same frequency as before. Hence the same vowel may be sung on different pitches (fundamentals). Whispering the vowel (substituting glottal friction for voice) reveals the characteristic resonance of the mouth shape for that same vowel without the fundamental and partial vibrations of the vocal cords. Hence a vowel can be whispered on only one pitch.[29]

70. A **consonant** depends for its identification, not upon the shape of the resonance cavity, but chiefly on **contact or narrowing** of the speech organs. We know when we are making a vowel chiefly by the shape of the mouth and the resulting resonance, which we know how to make, if not to describe. We are aware of pronouncing consonants chiefly by the sensations of contact or narrowing of particular speech organs, as the lips, the tongue against the teeth or approaching the teethridge or velum, etc. The consonants vary more in variety of sound than the vowels.

[29] There are slight variations, within limits, of the characteristic pitches of the different vowels. The above explanation in the main follows the findings of Dayton C. Miller (*The Science of Musical Sounds*, N. Y., 1926).

In the first group, the **stops,** the contacts of lips or tongue and velum make complete closure of the breath passage. In the second group, the **fricatives,** there is either contact together with friction (**f, v, θ, ð**) or narrowing with friction (**s, z, ʃ, ʒ**); in the **affricates** (**tʃ, dʒ**) there are both. In the **sonorants m, n, ŋ,** there is lip or tongue contact together with open velum, and in **l** there is tongue contact with closed velum. The sonorants are the most sonorous of the consonants, and are hence often syllabic (see §86); for this reason they have sometimes been falsely called vowels. Contact, not tone quality, is the essential of their formation (see §71).

71. With the **gliding consonants w, j,** and **r** (**ret, brɛd**) the situation is modified but the same at bottom. These consonants result from an immediate rapid movement of the lips and tongue, or tongue alone, from the positions for the vowels **u, i, ɝ** to a following vowel (see §37). If the voice is uttered while the lips and tongue are held fixed for a perceptible moment in the vowel position, the vowel **u, i,** or **ɝ** is heard. Though the lips are narrowed or the tongue approaches the palate or the velum, yet this is not significant, but incidental to forming the shape for the vowel resonance, which is the predominating feature; but if the lips and tongue immediately move toward a following vowel, the perception of this vowel resonance is prevented, and the sense of narrowing—considerably enhanced by the quick movement—becomes dominant, and we have a consonant **w, j,** or **r.**[30] The difference in feeling at the lips or the tongue is very obvious on comparing the utterance of **u, i,** or **ɝ** with that of **w, j,** or **r.** The close relation of these three vowels to the corresponding consonants, the nearly even balance of the features of resonance and narrowing, is suggested by the name **semivowels** often used of **w** and **j.** But **w, j,** and prevocal **r** are not

[30] Compare the difference in muscular sensation in bending the elbow slowly and then with a jerk.

half vowel and half consonant; they are true consonants, and **u, i, ɝ** are true vowels, for the reasons given.[31] Walker (1791) pointed out that the sounds **w** and **j** were treated popularly as consonants in actual unconscious speech by the use of the indefinite article **ə** (**ə wɔk, ə jok**). Likewise today the definite article **ðə** and the preposition **tə** are used (**ðə wɔk, ðə jok, tə wɔɚ, tə juɚəp**) as before other words beginning with consonants. But **ən, ðɪ,** and **tʊ** are used before **u, i,** and **ɝ** (**ən uzɪŋ sprɪŋ, ðɪ ist, tʊ ɝdʒ,** etc.).[32]

72. **Resonance form** of the mouth cavity is thus the key to the **vowel,** and **contact or narrowing** the key to the **consonant.** But many consonants also show distinct resonance, while they remain consonants; as the voiced consonants, and especially the sonorants **m, n, ŋ, l.** The consonant **l** has very marked resonance quality; **l** sounds can be made that by their tone quality suggest all the different vowels. But the tone quality is not the identifying feature; it is only incidental. None of its various resonances changes **l** into any vowel. It is the point contact and lateral opening of the tongue, with closed velum, that makes and keeps it **l.** Likewise some vowels also have marked contact or narrowing. The contact of the tongue for **i** may be greater than that for **l,** as shown by palatograms,[33] or by rapidly breathing these sounds. But it is not the contact that identifies **i;** it is its tone quality. So the vowel **u** has close narrowing of the lips; but this is likewise incidental to the formation of the cavity for the characteristic resonance of **u.**[34]

[31] For the manner of writing these sounds in transcription, see §382.

[32] **ðə** is sometimes assimilated to **ðɪ** before **j** (**ðɪ jɑɚd**), and **tə** to **tʊ** before **w** (**tʊ wɔɚ**); but **ə, ðə,** and **tə** otherwise remain unchanged before **w** and **j.**

[33] Cf. Daniel Jones, *Outline of Phonetics,* 3d ed., 1932, pp. 64 and 161, Fig. 85.

[34] For some of the foregoing ideas about vowels and consonants I am indebted to Jörgen Forchhammer (see Bibliography). But some of my conclusions disagree with his.

73. In studying the vowels it is important to get a clear idea of the **positions of the tongue,** especially its position forward or backward, and its height up or down as determined in part by the raising or lowering of the jaw.

Pronounce **i** (*beet*) with the finger held lightly against the tip of the tongue. Then sound **u** (*pool*). The tip of the tongue has receded, and the back of it is raised up in the back of the mouth toward the velum. With reference to these positions of the tongue, then, **i** is a **front vowel** and **u** a **back vowel.** Try the same with the pairs **e** (*bait*)—**o** (*coat*), and **æ** (*bat*)—**ɑ** (*ah*), and it will be evident that **e** is front and **o** back, **æ** is front and **ɑ** back, though the tip of the tongue has receded less from **æ** to **ɑ** than it did from **i** to **u.**

74. Brace the thumb and finger under the bone of the jaw so as to feel any upward or downward movement, and also with a mirror watch the amount of space between the front upper and lower teeth. Then pronounce in succession the vowels **i** (*beet*), **e** (*bait*), **æ** (*bat*). For **i** the jaw is nearly closed, but it drops a little for **e,** and a little lower for **æ.** The body of the tongue goes down with the jaw, the point of it remains on or near the lower front teeth, and for each vowel in turn the front of the tongue is less elevated toward the hard palate. Repeat the experiment till this becomes entirely clear.

75. Of the front vowels, then, **i** is **high-front, e** is **mid-front,** and **æ low-front.** Now try the same for the back vowels **u** (*pool*), **o** (*coat*), **ɑ** (*ah*), and it will be seen that **u** is **high-back, o mid-back,** and **ɑ low-back.** The lips will hide the teeth and the back of the tongue for **u,** but a small flashlight will show that the back of the tongue is high toward the velum for **u,** and successively lower for **o** and for **ɑ.** The back of the tongue is lower than the front is for **i,** and lower for **ɑ** than the front is for **æ** Fig. 9, p. 66. Verify these six tongue positions with the thumb and finger on the jaw as before by pronouncing in succession the

pairs **i—u, e—o, æ—ɑ,** observing within each pair the backward movement of the tongue, and the successive lowering of the jaw for the second and third pairs.

76. Watch the separation of the teeth while pronouncing alternately **i** (*beet*) and **ɪ** (*bit*). The teeth are slightly farther apart for **ɪ** than for **i.** Hold the butt of a pencil between the front teeth, not inserted far enough to interfere with the tongue. It will be found possible to sound **ɪ** after **i** without lowering the jaw. In this case the top of the tongue is lowered and retracted a trifle for sounding **ɪ.** The same may be tried for **e** and **ɛ,** and for **u** and **ʊ,** with a similar result. With some speakers the tongue is tenser for **i, e, u** than for **ɪ, ɛ, ʊ,** respectively, and some phoneticians regard this as the important difference between them. The difference in tenseness is less certain for the lower vowels. No English vowels are so tense as some of the French and German vowels, and the present author does not regard the distinction by tenseness and laxness as being so important as the difference in the height of the tongue.

77. Pronounce before a mirror the series **u, ʊ, o, ɔ, ɑ** (the back vowels from the highest downward); and **æ, ɛ, e, ɪ, i** (the front vowels from the lowest upward). For **u** the lips will be seen to be closely **rounded and closed at the edges,** and successively less until for **ɑ** they are **wide open** up and down and **spread to the corners.** Then beginning with **æ** they remain **spread laterally** while they approach each other vertically a little more for each of the front vowels from **æ** to **i.** In English only the back vowels (except **ɑ**) are rounded. The rounding is less marked in familiar connected speech than in sounding isolated vowels and separate words for experiment. It is usually somewhat less in American than in British speech, being often little more than compression of the lips at the corners.[35]

[35] Bloomfield's statement (*Language,* N. Y., 1933, p. 105) that "Different positions of the lips play no part in American English vowels, except for one minor fact [w?]," is somewhat extreme.

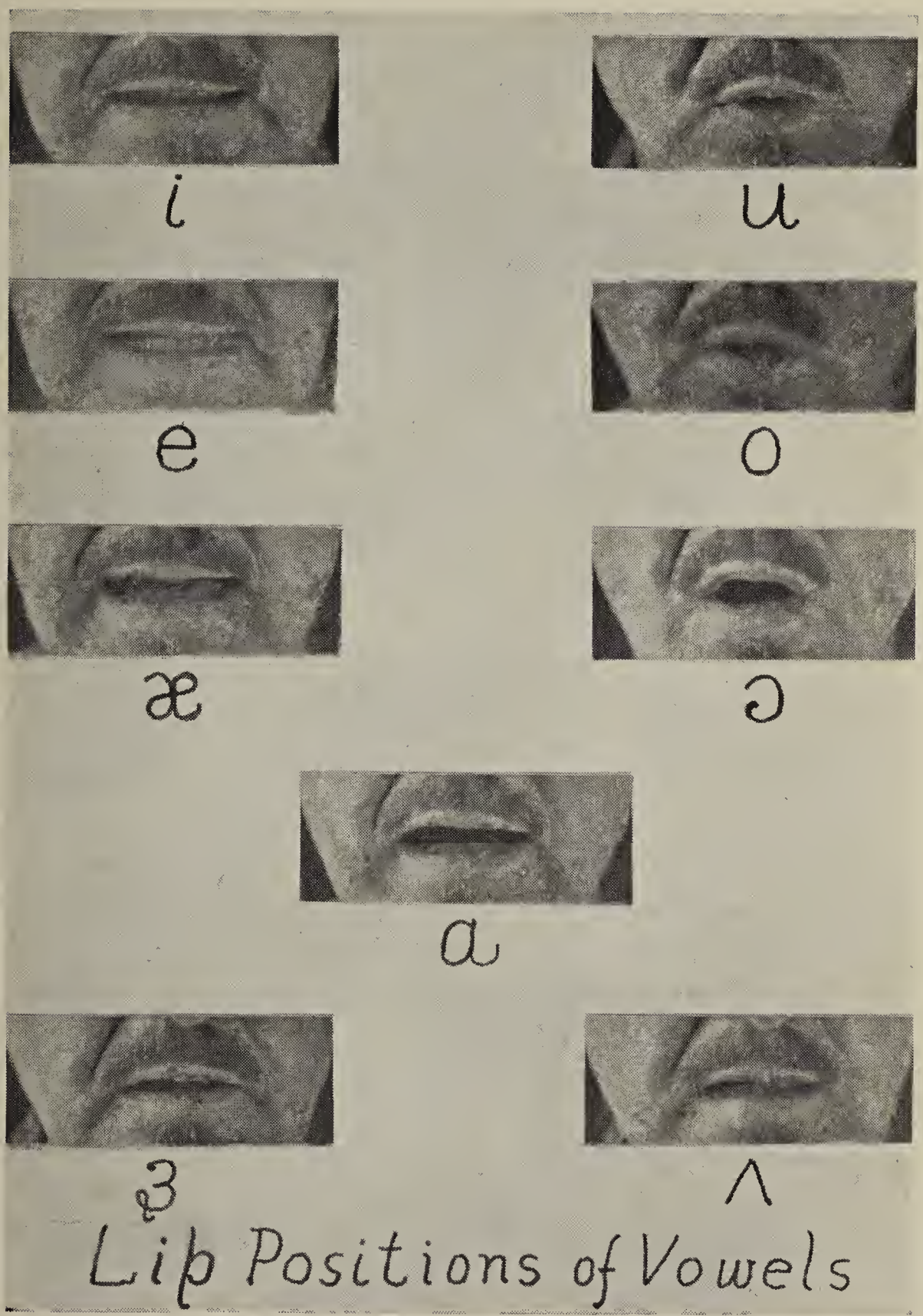

FIG. 8.

None of our front vowels are now rounded, though in Old English and Middle English there were high-front rounded and mid-front rounded vowels that have since been unrounded.[36] Other languages, as German and French, also have front rounded vowels. It is good practice to learn to shape the lips independently of the position of the tongue; as to sound **u** and then without moving the lips from the **u** position try to sound **i**; or to sound **o** and with the lips kept in the **o** position try to sound **e**; or to sound **ɔ** and with the same lip position sound **æ**. These efforts should result in making the high-front-round **y** as in German *kühn* **kyːn**, or French *dur* **dyːr**; and the mid-front-round **ø**, as in G. *tönen* **tøːnən**, or Fr. *peu* **pø**; and the low-front rounded **œ**, as in G. *Völker* **fœlkər**, or Fr. *peur* **pœːr**. Likewise it is instructive to practice pronouncing the higher back vowels unrounded by holding the lips fixed after sounding **i** and trying to sound **u**; or after **e**, and trying to sound **o**, etc. Some languages (as Indo-Chinese) have such unrounded back vowels.

78. Pronounce **æ** and **ɑ**, and then watch the tongue while trying to stop it halfway back from **æ** to **ɑ**. This gives the **low-central** tongue position. Do the same for **e** and **o**, using for a halfway station the last sound in *sofa* **sofə**. This gives the **mid-central** tongue position.

79. The tongue and lip position for each vowel can thus be indicated by the proper combination of descriptive terms, as **high-front, mid-back-round,** etc. The terms **advanced** and **retracted** may be added for minor variations forward and backward from the main positions, and the terms **raised** and **lowered** for minor variations up and down from them. The following are the designations of the American vowels:

i high-front (hf)
ɪ lower high-front (lhf)
u high-back-round (hbr)
ʊ lower high-back-round (lhbr)

[36] The word *busy* contained the high-front rounded vowel that has since become an unrounded **ɪ**, but the spelling *u* came from the time when it was rounded.

e higher mid-front (hmf)	ɜ, ɚ, ɜ, ə mid-central (mc)	o mid-back-round (mbr)
ɛ lower mid-front (lmf)	ʌ lower mid-central retracted (lmcr)	ɔ higher low-back-round (hlbr)
æ low-front (lf)	a low-central advanced (lca)	ɒ low-back-round (lbr)
		ɑ low-back (lb)

80. In these descriptions it is the position of the highest part of the tongue that is designated, since that is most important for the vowel because it serves to divide the mouth cavity. Notice, e.g., that it is possible to alternate **æ** and **ɑ** with the point of the tongue resting on the backs of the lower teeth for both; but the front is raised for **æ**, and the back (though less) for **ɑ**.

81. The scientific value of the designation of vowels by tongue position has been questioned. Its uniformity among different speakers of the same dialect has no doubt been exaggerated. Some phoneticians have gained such skill in observing their own tongue positions that they can perceive very slight changes in their vowels by the change of tongue position. Such skill is very valuable for its possessor. But evidence is yet lacking that all speakers of a language pronounce the same vowels with the same tongue positions, and the value of elaborate schemes for indicating tongue positions with mathematical precision may perhaps be doubted. Even x-ray photography does not show uniform results, though excellent technique has been developed for making uniform measurements.[37] On seeing an x-ray photograph of the vowel **ɑ**, e.g., one may well ask "Whose **ɑ**,[38] and what **ɑ**?" There are many different **ɑ** sounds any one of which would make the word *father* quite intelligible.

[37] Cf. C. E. Parmenter, S. N. Trevino, and C. A. Bevans, *A Technique for Radiographing the Organs of Speech during Articulation*, *Zeitschrift für Experimental-Phonetik*, Leipzig, July, 1931, Band I, Heft 2.

[38] The usual biography of the subject does not answer this question; one must hear him talk.

82. There are other factors than the tongue that enter into the production of the required vocal cavity for a vowel. Mouths are not all shaped alike, and compensating adjustments are made by the walls of the pharynx, by the cheeks, and possibly even by the vocal cords.[39] Yet tongue position is the best means yet discovered for convenient description of the vowels. Of its essential validity there is little doubt. It accounts better than anything else for many vowel changes that have occurred in various languages, and if interpreted with moderation and caution, there is no doubt of its usefulness.

83. The chart (Fig. 9, p. 66) of the tongue positions of the vowels (those of the author except ɜ and ɒ) is intended to represent only approximately the relative positions of the tongue for the different vowels. Its irregular shape is designed to suggest only roughly the successive retraction of the tongue from the high-front to the low-front and low-back vowels, and to show the somewhat larger range of differences in mouth opening for the front vowels than for the back vowels. The left side of the chart represents the front of the mouth of a person facing the left.[40]

84. Vowel Quantity. In phonetics quantity (length or shortness) means duration only, and must not be confused with the traditional unscientific distinction such as that between so-called "short *a*" in *sand* and "long *a*" in *late*. The vowels in

[39] The possibility of such compensating adjustments is shown by the fact that, with a pencil butt inserted between the teeth to hold the jaw rigid, all the vowels can be pronounced recognizably.

[40] The relative nearness of **e** to **ɪ** and of **o** to **ʊ**, also confirmed by Parmenter and Trevino (*Vowel Positions as Shown by X-rays, Quarterly Journal of Speech*, June, 1932), has important bearings on the historical development of these sounds. For example, ME **ɪ** when lengthened often became **eː** and **ʊ** became **oː**. A result of this is seen in the present double pronunciation of *creek* as **krɪk** and **krik**. Cf. also the variation in the pronunciation of *poor* as **pʊə** and **poə**, found in standard British and dialectal American.

these two words, though both spelt with the letter *a*, are actually different vowels, one being æ and the other **e**. They differ in **quality**—the way they sound to the ear—which is due to the difference in position of the vocal organs. But in **quantity**, or length, the "short *a*" in *sand* is actually longer than the "long *a*" in *late*.

The subject of vowel quantity is not yet fully understood.

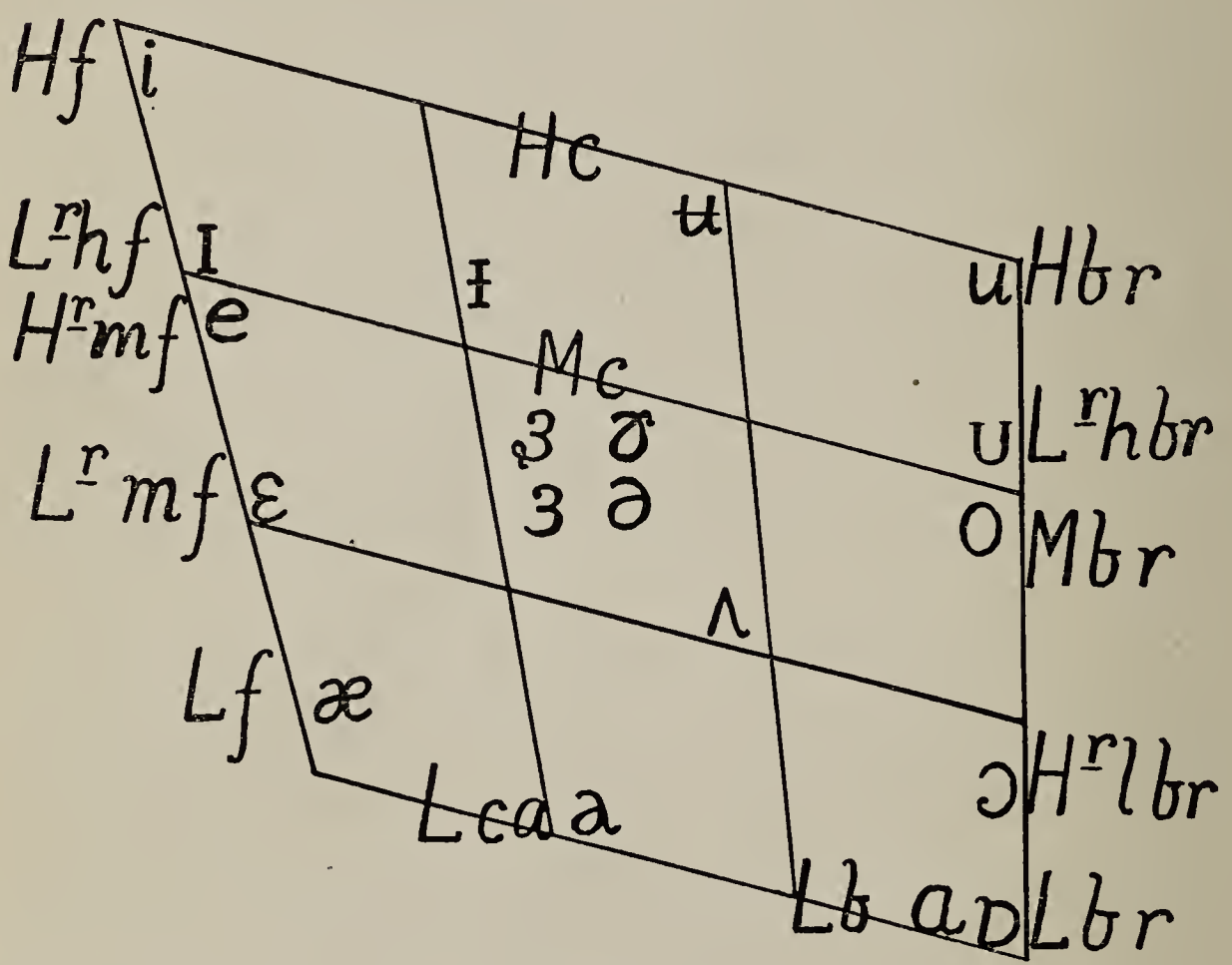

FIG. 9.—Chart of the Tongue Positions for the Vowels.

Hf = High-front	Hc = High-central	Hbr = High-back-round
Lʳhf = Lower high-front		Lʳhbr = Lower high-back-round
Hʳmf = Higher mid-front	Mc = Mid-central	Mbr = Mid-back-round
Lʳmf = Lower mid-front		Hʳlbr = Higher low-back-round
Lf = Low-front	Lca = Low-central advanced	Lbr = Low-back-round
		Lb = Low-back

Interesting and valuable facts are presented by E. A. Meyer,[41] Otto Jespersen,[42] and C. H. Grandgent[43]—the first two for British English and the third for American, which differs somewhat in laws of quantity. Professor Grandgent distinguishes four degrees of vowel length; namely, short, half-long, long, and overlong. These terms refer to the relative lengths of vowels uttered by the same speaker under the same conditions, not to absolute duration or time-length, which depends on rapidity of speech, differing with the habits and mood of the speaker.

In this book quantity is not usually indicated in transcriptions. When it is indicated, the International symbol ˑ is placed after the vowel to indicate that it is half-long, and the symbol ː, to indicate that it is long. The combination of the two ːˑ may be used to indicate a vowel that is overlong. Unmarked vowels are to be regarded as short when mentioned in connection with other vowels that are marked for length.

Only a few laws of vowel quantity are here given, since length of vowels, like that of consonants, is not distinctive in American English; there are no pairs of words that differ solely in length of the vowel. For example, the words *seat* **sit** and *sit* **sɪt** differ in quality of vowel, and if they differ in length, it is not noticed, because it is not distinctive. The following should, however, be mastered. Note carefully that the signs used indicate relative length only; i.e., that the marks indicate only that the vowels in question are longer or shorter than those mentioned in the same connection. Thus vowels with similar marks may have different absolute lengths.

1. The same vowel, if stressed, is **longer when final** or **before a voiced consonant** than it is **before a voiceless consonant:**

siː, siːd—sit **sɛːd—sɛt**

[41] *Englische Lautdauer*, Uppsala & Leipzig, 1903.
[42] *Grammar*, I. (Heidelberg, 1909), §§16.31 ff.
[43] *Die Neueren Sprachen*, II, 463 ff. (1895).

2. The same vowel, if stressed, is **longer when final** or **before a final consonant** than it is when **followed by an unaccented syllable:**

steɪ, steɪd—steɪɪŋ **koˈt—koˈtɪŋ**

3. The same vowel, if stressed, is **longer when followed by a sonorant m, n, ŋ, l+a voiced consonant** than it is when followed by the **sonorant+a voiceless consonant:**

θʌɪmd—θʌmpt **peɪnd—pent**
brɪɪŋz—brɪŋk **wɔɪlz—wɔlts**

4. The same vowel becomes **longer or shorter** as its **stress is increased or decreased:**

ˈdaɪɪ—ˌdaɪˈəgˈnosɪs—daɪˈægənəl **ˈnoɪtəbl̩—ˌnoˈtəˈbɪlətɪ—noˈteʃən**

The low-front vowel **æ,** commonly called "short *a*" (*hat*), and the low-back **ɑ,** which in General American usually replaces "short *o*" (*hot*), are particularly subject to lengthening under stress. Such words as *sat, had, lot, odd,* when stressed, often have fully long **æɪ** and **ɑɪ,** respectively. Professor Daniel Jones mentions the lengthening of **æ** in Southern British speech.[44]

For fuller treatment of vowel length in American English, see Webster's *New International Dictionary, Second Edition,* 1934, *Guide to Pronunciation,* §49.

85. The Syllable. In spelling, the division of words into syllables is conventional, and does not always correspond to the actual division made in speech. For the rules of syllable division in writing, see Webster's *New International Dictionary, Second Edition,* p. lviii.

86. According to the theory probably now most widely accepted, the division of words into syllables in actual speech

[44] *Outline of English Phonetics,* N. Y., 1932, p. 218.

depends upon the principle of **sonority** or degree of audibility, of speech sounds. Vowels are the most sonorous of the speech sounds, the sonorants **m, n, ŋ, l** are next, then the other voiced consonants, the voiceless fricatives, and least of all the voiceless stops, **p, t, k,** which, apart from their on-glides and off-glides, have no sonority at all. The phonetic center, or "peak" of a syllable is its point of greatest sonority.

Another theory is that the syllable is begun, and thus marked off, by a muscular pulse from the chest, or in some cases by the force of the consonant movement in the mouth. See §62, footnote 24. The two theories are perhaps not contradictory, the one dealing chiefly with the center of the syllable and the other with its boundaries.[45] In spite of the uncertainty as to the nature of the syllable, it is perhaps the most easily perceived unit of speech.

87. Usually a vowel is the center of a syllable, alone or with a consonant. But certain consonants, the sonorants **l, m, n, ŋ,** can form syllables, alone or with other consonants, without any vowel whatever, as in *cattle* **kæt-l̩**, *saddle* **sæd-l̩**, *open* **op-m̩**, *mob 'em* **mɑb-m̩**, *cotton* **kɑt-n̩**, *sudden* **sʌd-n̩**, *Jack and Jill* **dʒæk ŋ dʒɪl**, *crag and cliff* **kræg ŋ klɪf**, *settled* **sɛt-l̩d**, *handled* **hæn-dl̩d**, *battled* **bæt-l̩d**. If any vowel whatever, no matter how obscure or short, intervenes, it becomes the syllabic sound, and the consonant is no longer syllabic.

88. No vowel can intervene if the speech organs, the lips or the tongue, hold the same position from one consonant to the next, as in the above examples, the tongue point remaining on the teethridge for **tl̩, dl̩, tn̩, dn̩;** the lips remaining closed for **pm̩, bm̩,** and the tongue back remaining on the velum for **kŋ, gŋ.**

89. When the lips or tongue must change position from one of the consonants to the next, if the opening is not made wider than for either of the consonants, the opening will be too narrow

[45] For fuller discussion, see Webster (1934), *Pronunciation*, §59.

to form a vowel, and the second consonant will still be syllabic; as in *castle* **kæs-l̩**, *prison* **prɪz-n̩**, *chasm* **kæz-m̩**, *Jonathan* **dʒɑnəθ-n̩**, *mason* **me-sn̩**. Sometimes the organs can reach the second position before the first is released, as in *maple* **me-pl̩**, *bubble* **bʌb-l̩**, in which the tongue point reaches the teethridge before the lips open from **p** or **b**; or in *buckle* **bʌk-l̩**, *straggle* **stræg-l̩**, in which the tongue point reaches the teethridge before the back leaves the velum; or in *slogan* **slo-g̩n̩**, *beacon* **bi-kn̩**, in which the same is true.

90. In the first class of cases, when the consonants are homorganic, if the contact is broken, a vowel **ə** or **ɪ** intervenes, as in *Boston* **bɔstən**, *London* **lʌndən**, *mountain* **maʊntɪn**. Syllabic consonants are the rule in the first sort of cases. But in the other two classes, the opening for the transition may be wide enough, or the second position may not be reached till after the first, so that vowels are more likely to intervene and the second consonant cease to be syllabic. Such pronunciations are very common in these words, as **mesən, dʒɑnsən, mepəl, ɔfən, ivən, bekən, slogən.**.

91. It is to be observed that no consonants except the sonorants **m, n, ŋ, l** can be syllabic and only in unaccented syllables; and that these are syllabic only after certain consonants. Thus the nasals are not syllabic after nasals. Hence such transcriptions as **kɑmn̩** for *common*, **vɛnm̩** for *venom* are wrong; without a slight vowel, there would be but one syllable. In some cases, too, where a syllabic consonant is *possible* it is very unlikely, as in *bottom*, where the pronunciation **bɑtm̩** would be unusual. When a sonorant **l** is syllabic after a nasal as in *channel* **tʃænl̩**, *trammel* **træml̩**, the nasal remains nonsyllabic if their order is reversed, as in *Milne* **mɪln**, *elm* **ɛlm**. Hence the contracted form *swoln* is pronounced either **swoln** (one syllable), as in Milton, or **swolən**, not **swoln̩**. So too consonants are unlikely to be syllabic after vowels. Though it is possible by special effort to pronounce **bæəl̩**, **vaʊl̩**, in ordinary speech they

are **bæ˞əl, vaʊəl.** Such words are often also monosyllabic (see further, §355). The combinations **θm̩, ðm̩, sm̩, zm̩,** as in *rhythm, prism* are not usual, though here the current spelling often leads to regarding these as syllabic. The usual pronunciation of these words is probably **rɪθəm, rɪðəm, prɪzəm, blɑsəm, kæzəm,** etc., as recognized by Hempl long ago.[46]

92. British practice differs in some words in regard to syllabic consonants from that in America. Words in *-tion* appear to be there more commonly pronounced with **n̩** (**neʃn̩, kəndɪʃn̩,** etc.) which in America usually have **-ən** (**neʃən, kəndɪʃən,** etc.). So with **vɪʒən, dɪˈsɪʒən,** etc.

93. The boundary between two syllables may fall between two consonants, as in **rɛd-nɪs,** between two vowels, as in **krɪ-ˈet, ɪndɪ-ən,** or it may fall within a consonant, or be doubtful, as in **hæ-p-ɪ.** This uncertainty has sometimes led to the unconscious transfer of a sound from one word to another, as when *a norange* **ə nɔ˞ɪndʒ** became **ən ɔ˞ɪndʒ,** or **ə nepə˞n** became **ən epə˞n;** or vice versa, *an eke name* became *a nickname;* or Middle English *at ten Oakes* **ɑt tən ɔːkəs** "at the oaks," became *atte Noakes* **ɑttə nɔːkəs** "at Noakes," and then *Noakes* **noks,** a place in Herefordshire. Likewise the ME *at ten Ash* became *atte Nash,* place name and personal name (from the place name).

94. Assimilation. Assimilation is the phonetic process by which one sound is made to resemble a neighboring sound. For example the word *open* **opən** is often pronounced **opm̩.** Here **n** is assimilated, or made like, to **p;** i.e., the tongue-point alveolar nasal is changed into the lip nasal under the influence of the lip sound **p.** In this case the combination **pm̩** is made with one position of the lips, whereas **pən** or **pn̩** requires a position of the lips followed by a position of the tongue. Thus there is a degree of economy of effort in the assimilation of **n** to **p.**

95. All assimilation is based on the tendency of the organic

[46] Cf. also Wyld, *Universal English Dictionary,* London, 1932.

positions for one sound to become the same in part or entirely as the organic positions for a neighboring sound. Thus when **opn̩** is changed to **opm̩,** the tongue-point alveolar closure, the open velum, and the vibrating vocal cords of **n** change only to lip closure, in conformity to the lip closure of the neighboring **p,** retaining the open velum and vibrating vocal cords. This combination produces **m.** When **kɑnkwɛst** is changed to **kɑŋkwɛst,** the tongue-point alveolar contact of **n,** with open velum and vibrating cords, changes to tongue-back velar contact, in conformity to **k,** retaining the open velum and vibrating cords. This combination produces **ŋ.** When the word *class* **klæs** is (as often) pronounced **tlæs,** the tongue-back velar contact of **k,** with closed velum and open (silent) vocal cords, is changed to the tongue-point alveolar contact that the following **l** has, the closed velum and open vocal cords being retained. This combination makes **t.** When **ˈgus|bɛəɹ** is changed to **ˈguz|bɛəɹ,** the tongue-blade alveolar narrowing of **s,** its fricative sound of breath, and its closed velum, are retained in **z,** but the open vocal cords of **s** are changed to the vibrating vocal cords of **z** in conformity to those of the voiced **b** (and also of the preceding vowel).

96. For brief descriptions of such assimilative changes, mention may be omitted of those organs that remain unchanged, and such an assimilation as the change from **klæs** to **tlæs** may be briefly described as the assimilation of a tongue-back velar **k** to the tongue-point alveolar **l,** which produces **t.** Then, since the vocal cords are independent of the oral speech organs, it is practically convenient to speak of the change of position in them as voicing or devoicing. Hence for practical description we may speak of two kinds of assimilation—**place assimilation** (**opn̩** to **opm̩**) and **voice assimilation** (**ˈgus|bɛəɹ** to **ˈguz|bɛəɹ**), though, strictly, all assimilation is place assimilation.

97. In the example **opn̩—opm̩** the position of the lips for **p**

was continued, or carried forward, replacing the tongue-point position of a **n** by the closed lips of a **m.** Such effect of a preceding sound on a following one is called **progressive assimilation,** the second sound being assimilated (made like) *to* the first. On the other hand, when **grænpɑ** becomes, as usually, **græmpɑ,** the lip closure for **p** is anticipated and taken during the **n** or in place of it, thus putting **m** in place of **n.** Where a following sound is thus anticipated and changes a preceding one, the process is called **regressive assimilation.** In this case the first sound is assimilated *to* the second.

98. Frequently assimilation is only partial, as in **opm̥,** in which **n** becomes **m,** more like **p** than **n** is, but not identical with **p.** Complete assimilation is seen in the pronunciation **ðɪʃ-ʃo** for *this show.* But the distinction is not of great importance, as Jespersen has shown,[47] for the same change may be partial in one case and complete in another. Thus when **s** becomes **ʃ** in *this year* **ðɪʃ jɪə˞,** the likeness to **j** is partial; but the likeness to the following sound is complete in **ðɪʃ-ʃo.**

99. Some assimilations have become permanent, as the change of **d** to **t** in *looked* **lukt,** while others occur only occasionally, as in **opm̥ ðə doə˞,** especially when they are the result of the occasional juxtaposition of sounds in varying groups of words, as in *meet you* **mitʃu** (cf. *meet me* **mit mɪ,** *saw you* **sɔ ju**).[48]

100. Assimilation applies to vowels as well as to consonants; but the principal influence of vowels is in voicing neighboring consonants, especially those between vowels (where the assimilation is both regressive and progressive). In the past, how-

[47] *Lehrbuch,* p. 169.

[48] Professor Daniel Jones distinguishes between **assimilation**—the change of a sound due to a neighboring sound, as in **opm̥**—and **similitude**—the permanent resemblance of certain neighboring sounds, as of the partly voiceless **l** to voiceless **p** in *please.* It is not possible to know in all cases whether the particular resemblance always existed, or was the result of assimilation at some time in the past. The organic principle appears to be the same in both.

ever, vowels have changed extensively by assimilation. The result of such a change is seen in *fill* beside *full*, with the same vowel originally.

101. Consonants that have changed by assimilation are sometimes lost later, but their former existence is often shown by the spelling, as in the place name *Defford* **dɛfəd**, formerly **dɛf-fərd**, *cupboard* **kʌbəd**, *raspberry* **ræzbɛəɪ**.

102. In the following examples explain the consonant assimilations shown in transcription, and where ordinary spelling is used, state what assimilations are usual in current colloquial speech. Show whether there is voice assimilation, or place assimilation, or both together; and explain the changes in the position of the speech organs for the place assimilations. The examples do not all belong to the same level of usage.

hæŋkətʃɪf, ˈræz|bɛəɪ, græm-mɑ, ˈbaɪmˈbaɪ, hi jus tə du ɪt, hil hæf tə go, *walked, chopped, wished, hissed, puffed, frothed, eighth,* **kʌp m̩ səsə, sɪˈdaun,** *husband* (housebond), *huzzy* (housewife), *cupboard, conquest, conquer, Concord* (Mass.), *gosling, Goswell* **gɑzwɛl,** *Gosbeck* **gɑzbɛk,** *East Riding* (from East Thriding = "third"), *blackguard* **blægɑəd, blægəd,** *clapboard* **klæbəd,** *cats* (Middle English **kɑt-təz**), *robes* (ME **rɔːbəz**), *ropes* (ME **rɔːpəz**), **pʌŋkɪn** (18th c. pumkin), **ˈnɪʉs|pepə,** *I can go, I can't come,* **gɪm(m)ɪ ənʌðə, lɛmɪ si ɪt, sɛbm̩, lɛbm̩, tlæs, dlæs, bæg ŋ bægɪdʒ,** *wives, worthy* (cf. worth), *heathen* (cf. heath), **aɪ don-no, aɪ doŋ kæə, aɪ domp bl̩iv ɪt,** *fippence* **fɪpəns, hwɑdə jə wɑnt? dɪdʒu si ɪm? səəɪ tə mɪʃ ʃu, dʌʒ ʃɪ no ɪt? du əz i tɛlʒ ʒu, aɪʃt θɪŋk so, ʃʌtʃə aɪz, ɪt kæmp bɪ dʌn, ðɪʃ jɪə, læstʃɪə, pliʒ ʃʌt ðə doə, sɪks mʌnts əgo, lɛs go! ju məʃ ʃo mɪ haʊ, æst tɑm, ðə sɛkənt taɪm, gʌvəmənt,** *wristband* **rɪzbənd,** ˈ**hɔəʃ |ʃu,** *he hit it "pime blank," "Saddy"* (Saturday), **sm̩ pɔlz tʃɜtʃ,** *vamp* (Fr. avant-pied), *count* (Lat. comitem), *tense* (L. tempus), *had* (ME **hɑd-də** from **hɑvdə**), *subscription* (cf. subscribe), *complete* (L. con-), *suppose, illegal, immense, oppose* (cf. obˈject), *announce* (cf. adopt), *Retford* (red

ford), *Shefford* (sheep ford), *Defford* (deep ford), *Sampford* (sand ford), *Mitford* (mid(dle) ford), *Stafford* (ford situated at Stath), *Ratcliff* (red cliff), *Bedlam* (Bethlehem), *Suffield* (south field), *Bromfield* (Cumberland—brown field; elsewhere this name means "field of broom"), *Sheffield* (Yorkshire—field on the river Sheath, now called the Sheaf), *Sheffield* (Sussex—sheep field), *Glenfield* (clean field), *Smithfield* (from ME **smeːðə feld,** smooth field), *Metfield* (mead(ow) field), *Sutton* (south town = "farm"), *Wootton, Wotton* **wʊtn̩** (wood town), *Ditton* (dike town), *Pigdon* (pike down = "hill"), *Whaddon* (wheat down), *Shibden* (sheep den = "valley"), *Ogden* (oak den), *Debden* (deep den), *Brogborough* (brook borough), *Aggborough* (oak borough), *Sudbury* (south bury), *Suffolk* (south folk), *Sudeley* (south lea = "meadow"), *Waltham* **wɔltəm** (wald ham = "forest home"), *Rugby* (rook by = "rooks' dwelling"), *cobweb* (from *cop* = "spider"), *hobman blind.*

103. Study of the foregoing list shows some assimilations that would be looked upon by many as careless, while others are in undoubted good use. The *tendency* to assimilation as a result of the various sound junctions that are made in daily speech is always present. The necessity of making ourselves understood, as well as a conservative desire not to "mispronounce," exercises a restraining influence on the tendency, and prevents many changes that would otherwise proceed more rapidly in the language, tending to obscure the identity of some words. Our attitude toward assimilations must be determined by judgment, by observation of the actual habits of people who are accepted as speaking well, and by a desire to speak clearly without being artificial. Too much avoidance of the common assimilations of current good usage, such as the insistence on **mit ju, dont ju, netjuɚ, ɛdjukeʃən,** instead of the normal **mitʃu, dontʃu, netʃɚ, ɛdʒukeʃən,** is pedantic; while too liberal surrender to the tendency results in careless or slovenly utterance.

STRESS

104. Stress in English may be defined as the **prominence** given in speech to a syllable or a word which makes it stand out to the attention above the syllables or words next to it. Stress, like quantity, is relative—not a fixed degree of prominence, but one greater or less than that of adjacent syllables. Stress may be of two kinds—**accent** and **sense-stress.** The term **accent** is used to indicate the stress given to a syllable above that of the preceding or the following syllable in a word of more than one syllable.[49] Thus in *going*, **go** is more prominent than **ɪŋ**, in *today*, **de** is more prominent than **tə** and in *invention*, **vɛn** is more prominent than **ɪn** and **ʃən.** The term **sense-stress** applies to the prominence given to a word over the preceding or following word in a group that makes sense. Thus in *I will do it now*, **aɪ, du,** and **naʊ** receive higher stress than **wɪl** and **ɪt.** Hence monosyllabic words, which by themselves have no accent, when joined in sense-groups—phrases, clauses, or sentences—take varying degrees of sense-stress, or none, according to the meaning expressed. When plurisyllables are so joined in sense-groups, they take sense-stress only on the syllables that would be accented if the words stood by themselves, so that accent and sense-stress coincide. Thus in the sentence *His father promised to reflect over it*, each of the words *father*, *promised*, *reflect*, and *over* takes a sense-stress on its accented syllable, that on *reflect* being the strongest, those on *father* and *promised* being next, and that on *over* being weaker.

105. The chief means of making a syllable or a word prominent by accent or sense-stress is increased force of utterance, or

[49] A **Monosyllable** is a word of one syllable; a **Plurisyllable** is a word of more than one syllable. Plurisyllables of two syllables are called **Dissyllables,** of three syllables, **Trisyllables,** and of more than three, **Polysyllables.**

loudness, caused in part by more forcible expulsion of air from the lungs through the vocal organs. But besides this, the prominence of a syllable is sometimes increased by lengthened duration of the syllable, and by changing the pitch of the voice.

The exact relations among force, time, and pitch as affecting stress are not yet known, but the ear in acquiring speech has learned to interpret the results of their combination in practice, so that, though we may not know, in such a word as *horseshoe*, ˈhɔɚsˌʃu, whether pitch, force, or time is the most important in differentiating the two syllables, we all easily recognize in practice that the first syllable is more prominent than the second. In some syllables of nearly equal force, either pitch or time, or both, may help in producing a sense of difference in their relative prominence.

The same marks may be used to indicate sense-stress that are used for word accent, with the same relative values (see §13). There are, of course, more distinguishable degrees of stress than the four here recognized, but these are sufficient for most practical study of English pronunciation.[50]

106. Plurisyllables have at least one main stress, called **primary accent,** as in *beating* ˈbitɪŋ, *followed* ˈfɑlod, *into* ˈɪntu. But not all primary accents are equal to each other. Primary accent means merely the strongest accent on the word. When plurisyllables occur in sense groups, their primary accents can be seen to be of different degrees. Thus in the sentence *he* ˈ*followed me* ˈ*quickly* ˈ*into the house*, each of the words *followed*, *quickly*, *into* has a primary accent; but that on *quickly* is slightly stronger than that on *followed*, and both are noticeably stronger than that on *into*. This difference is due to sense-stress (§§124 f.).

107. Even accent. A large number of more or less fixed combinations have what is called even accent, though the second accent of such groups is usually a trifle stronger than the first;

[50] The term *stress* in its narrower sense means "force," and in strictness should be applied only to force accent. But the word has gained a more general sense by usage, and is here used as a general term for accent or prominence of all kinds, without regard to its constituent elements.

as *ˈJames ˈBrown, ˈMrs. ˈWhite, ˈNew ˈEngland, ˈKing ˈAlfred, ˈWilson ˈAvenue, ˈfifˈteen, ˈtwenty-ˈfive, ˈwhite-ˈhot, ˈwell-ˈmade, ˈunderˈfed, ˈupˈstairs, ˈapple ˈpie, ˈsquare ˈrod, ˈfall ˈdown,* etc. These bear a close relation to similar combinations under the influence of sense-stress; in fact, this accentuation is a kind of sense-stress. (See §125.)

108. Secondary accent, or half stress, occurs in three principal types of words.

(1) It occurs in **compounds** such as *milkman* **ˈmɪlkˌmæn,** *childlike* **ˈtʃaɪldˌlaɪk,** *outrun* **ˌaʊtˈrʌn.** In **compound nouns and adjectives** the first element of the compound regularly has primary accent and the second element secondary accent. In **compound verbs** the reverse is true. This is a law of stress that has descended to us from the time of Old English. In this first type the primary and secondary accents may be **adjacent,** as in **ˈmɪlkˌmæn,** or **separated** by one or more syllables, as in **ˈθɜˌfæɚ.**[51]

109. The English habit of accenting compound nouns (or adjectives) and verbs thus differently has been also frequently applied to foreign loan-words whether compounds or not, the noun or adjective having first-syllable accent, and the verb second- or third-syllable accent (the secondary accent being sometimes omitted). Thus noun and verb: *ˈconˌtract—conˈtract; ˈexˌtract—exˈtract; ˈdiˌgest—diˈgest; ˈinˌsult—inˈsult; ˈobject—obˈject; ˈattriˌbute—atˈtribute;* or adjective and verb: *ˈperfect—perˈfect; ˈfrequent—freˈquent.* But there is some interference with

[51] In present usage there is no settled and consistent practice in the manner of writing compound words. Sometimes they are written as one word (*milkman*), sometimes with hyphen (*morning-glory*), and sometimes as separate words (*corn law*). The unsettled state of usage in this matter may be seen by noting in the *Oxford Dictionary* the recent quotations illustrating the last-named compounds and others. It is probably impossible at present to devise any entirely consistent and logical practice in the manner of writing compounds. The laws governing the meaning and stress of compounds are not yet fully known. For various types of compound stress, see Webster (1934), *Pron.* §63.

the operation of this habit, partly by the tendency to recessive accent, partly by the modern English tendency to use the same word as noun, adjective, or verb without change of accent, and partly by other causes, such as the influence of sentence rhythm in connected speech (see *Shifting Accent*, §123).

110. In some cases the same habit of accentuation takes the form of omitting the secondary accent in the noun or adjective and keeping it in the verb. Note the parallel accentual scheme in ˈ*over*ˌ*flow* (noun)—ˌ*over*ˈ*flow* (verb) and in ˈ*separate* (adj.) **ˈsɛpəɹɪt**—ˈ*sepa*ˌ*rate* (vb.) **ˈsɛpəɹˌet**. Hence we find pairs like the following:

Spelling	Noun	Adjective	Verb
alternate	**ˈɔltəɹnɪt**	**ˈɔltəɹnɪt**	**ˈɔltəɹˌnet**
appropriate		**əˈpropɹiɪt**	**əˈpropɹɪˌet**
animate		**ˈænəmɪt**	**ˈænəˌmet**
aspirate	**ˈæspəɹɪt**	**ˈæspəɹɪt**	**ˈæspəɹˌet**
compliment	**ˈkɑmplɪmənt**		**ˈkɑmplɪˌmɛnt**
consummate		**kənˈsʌmɪt**	**ˈkɑnsəˌmet**
deliberate		**dɪˈlɪbəɹɪt**	**dɪˈlɪbəɹˌet**
elaborate		**ɪˈlæbəɹɪt**	**ɪˈlæbəɹˌet**
estimate	**ˈɛstəmɪt**		**ˈɛstəˌmet**
moderate		**ˈmɑdəɹɪt**	**ˈmɑdəɹˌet**
ornament	**ˈɔɹnəmənt**		**ˈɔɹnəˌmɛnt**
separate		**ˈsɛpəɹɪt, ˈsɛpɹɪt**	**ˈsɛpəɹˌet**
supplement	**ˈsʌpləmənt**		**ˈsʌpləˌmɛnt**

111. (2) **Secondary accent** also occurs in words not usually considered as compounds, such as *ambush* **ˈæmˌbuʃ**, *convoy* **ˈkɑnˌvɔɪ**, *conflict* **ˈkɑnˌflɪkt**, *accent* **ˈækˌsɛnt**, *pathos* **ˈpeˌθɑs**, etc., in which primary and secondary accent are **adjacent.** The syllable next to the main accent receives secondary accent for various reasons: (a) Sometimes the half-stressed syllable is mentally **associated with an identical syllable** that is fully stressed

in a related word; e.g., the last syllable of the noun *conflict* **ˈkɑnˌflɪkt,** with secondary accent, is associated with the last syllable of the verb *conflict* **kənˈflɪkt** with primary accent, and so retains a part of its stress in the noun. Other examples of this are *ˈconˌtract* (noun) and *conˈtract* (verb); *ˈabˌstract* (n.) and *abˈstract* (vb. and adj.); *ˈconˌtrast* (n.) and *conˈtrast* (vb.); *ˈcomˌpact* (n.) and *comˈpact* (adj.); *ˈimˌpost* and *imˈpose; ˌcashˈier* and *cash; ˈloˌcate* and *loˈcation.* (**b**) Sometimes a word from a foreign language which is less popular may receive something of its **foreign stress;** e.g., *program* **ˈproˌgræm;** compare the more popular form **ˈprogrəm,** in which the secondary accent is lost. So *ˈsynˌtax, ˈcliˌmax, ˈvorˌtex.* (**c**) Sometimes **importance of meaning** in the half-stressed syllable leads to a secondary accent. Thus in *re-make* **ˌriˈmek,** *re-* has a sharper meaning than it does in *return* **rɪˈtɝn;** cf. *reˈact,* "respond to stimulus," with *ˌre-ˈact,* "act over again"; *reˈcover,* "get back," with *ˌre-ˈcover,* "cover again." In such cases emphasis leads to even accent: *ˈre-ˈact.* Some other causes also probably operate in giving a secondary accent to the syllable next to the primary in words not felt as compounds.

112. (3) Secondary accent occurs in a third type of words of **three or more syllables,** mostly borrowed from Latin or French, such as *ˈdesigˌnate, ˈintelˌlect, ˌascerˈtain, ˌcircumˈvent, ˌdeviˈation, ˌfundaˈmental, ˌperpenˈdicular, ˌuninˈtentional,* which are accented on alternate syllables with differing degrees of stress. In some longer words there are two stressless syllables between accented ones, as in *ˌcrystaliˈzation, ˌrealiˈzation.*[52] This accentuation is due to the natural **rhythm of speech.** When a series of three or more syllables are pronounced with one impulse of the

[52] Such accent on first and fourth syllables instead of alternating first and third is probably due to the combined analogy of two groups of words—one like *ˈcrystalˌize, ˈminiˌmize, ˈrealˌize,* with strong accent on the first, and the other like *ˌcombiˈnation, ˌdenoˈtation, asˌsociˈation* and others in *ˈ-ation,* with accent on the *-ˈa-.*

breath, they naturally fall into a rhythm of alternating higher and lower stresses. One or more of these is apt to be a secondary accent, as in the first syllable of *ˌperpenˈdicuˌlar*, and sometimes a third one is a light accent, as in the last syllable of the same word. Rhythmical accent is most frequently found in words derived from Latin or French, owing to their greater length, but occasionally is found in a native English word, as *ˈlovliˌness*.

113. Sometimes this law of rhythmic accent coincides with the old law of English accent in compound nouns, as in the native word *ˈthoroughˌfare*, which is accented on the first and last according to rhythm, and takes primary accent on the first, and secondary on the last, by the ancient law of compounds.

114. Free Accent, and Recessive Accent. In some long words the law of alternating rhythmical accent is interfered with by another ancient law of accent. In the Indo-European language, from which both English and Latin descended, the accent was originally **free**; i.e., it rested in some forms of a word on one syllable, and in other forms of the same word on a different syllable. This method of accenting continued to some extent in Latin, and is preserved in some English words taken from Latin. Note, for example, the variable position of the accent in the Latin derivatives *ˈfamily*, *faˈmiliar*, *faˌmiliˈarity*. On the other hand, at a prehistoric period in the English branch of the Indo-European family of languages, this movable accent gradually **receded** and became fixed on the first syllable of all forms of a word. This is seen in native English words, as in *love*, *ˈlovely*, *ˈloveliness*, *ˈlovableness*. This **recessive** accent is so firmly imbedded in English, that many words borrowed from Latin or French, at first with their foreign accent, have gradually succumbed to the native English law, and so receive their main stress at or near the beginning of the word. This law sometimes proves stronger than that of rhythmic alternation, so that while such a word as *ˌgeneˈration* follows the rhythmic law, the word

ˈ*generally* follows the law of recessive accent, with a strong accent on the first syllable, and none on the others. This law of recessive accent accounts (1) for the large number of English words accented on the first syllable, (2) for the large number of monosyllables in English, one or more syllables having been lost from the end of the word by gradual obscuration from the loss of accent after it had been shifted to the first syllable, and (3) for the loss of one or more syllables from words with only primary accent on the first syllable, as in Southern British ˈɔdn̩rɪ as compared with American ˈɔɚdn̩ˌɛɚɪ (see §116).

British and American Accent

115. The treatment of secondary accent in one group of words requires particular notice because of the difference between American and British practice. In words ending in *-ary*, *-ery*, *-ory*, such as *necessary*, *monastery*, *territory*, which are derived from Latin through Old French, the main accent in Old French was usually on what is now the next to the last syllable. After these words were taken into English in the Middle English period, the accent shifted to the fourth syllable from the last in accord with the native English tendency to accent words near the beginning; but, owing to the principle of alternating rhythm mentioned in §112, a distinct secondary accent remained where the main accent had been. Thus Middle English ˌ*neces*ˈ*sarie* became ˈ*neces*ˌ*sary*, and ˌ*terri*ˈ*torie* became ˈ*terri*ˌ*tory*. This secondary accent remained on these words till comparatively recent times in England, and it still remains in American English, constituting one of its most noticeable differences from British. Whitney (*Orient. and Ling. Stud. 2d Ser.*, 1874, p. 232) and later Jespersen (*Gram.* §§5.63, 9.77) pointed out that this originally British accentuation has been preserved in America.

There are hundreds of these words in English. Here are a few examples with their usual American and British pronunciation:

Spelling	American	British
adversary	ˈædvəˌsɛəɹɪ	ˈædvəsərɪ
commentary	ˈkɑmənˌtɛəɹɪ	ˈkɒməntərɪ
imaginary	ɪˈmædʒɪnˌɛəɹɪ	ɪˈmædʒɪnərɪ
January	ˈdʒænjuˌɛəɹɪ	ˈdʒænjʊərɪ
missionary	ˈmɪʃənˌɛəɹɪ	ˈmɪʃn̩ərɪ
momentary	ˈmoʊmənˌtɛəɹɪ	ˈmoʊməntərɪ
secondary	ˈsɛkənˌdɛəɹɪ	ˈsɛkəndərɪ
stationary (adj.)	ˈsteʃənˌɛəɹɪ	ˈsteʃnərɪ
voluntary	ˈvɑlənˌtɛəɹɪ	ˈvɒləntərɪ
millinery	ˈmɪləˌnɛəɹɪ	ˈmɪlɪnərɪ
presbytery	ˈprɛzbəˌtɛəɹɪ	ˈprɛzbɪtərɪ
stationery (n.)	ˈsteʃənˌɛəɹɪ	ˈsteʃnərɪ
auditory	ˈɔdɪˌtoəɹɪ	ˈɔdɪtərɪ
oratory	ˈɔəəˌtoəɹɪ	ˈɒrətərɪ
preparatory	prɪˈpæəəˌtoəɹɪ	prɪˈpærətərɪ
territory	ˈtɛəəˌtoəɹɪ	ˈtɛrɪtərɪ

116. The natural effect of omitting the secondary accent in British pronunciation is the loss of one or more unaccented syllables (see §114, above). Note the following British pronunciations given in Jones's *Pronouncing Dictionary:* **ˈdɪkʃənrɪ, ˈdɪkʃn̩rɪ; ˈmɪlɪtərɪ, mɪlɪtrɪ; ˈɔdn̩rɪ, ˈɔdɪnərɪ, ˈɔdɪnrɪ, ˈɔdnərɪ, ˈɔdn̩ərɪ; ˈsɛkəndərɪ, ˈsɛkn̩drɪ; ˈsɛkrətrɪ; ˈsɛdn̩tərɪ, ˈsɛdn̩trɪ; ˈtɛmpərərɪ, ˈtɛmprərɪ, ˈtɛmpr-rɪ; ˈvɛtn̩rɪ, ˈvɛtərɪnərɪ, ˈvɛtrɪnrɪ; sɛmɪtrɪ; ˈmɒnəstrɪ; ˈdɔmɪtrɪ.**

117. In some words British avoids an accumulation of obscure syllables, not by preserving the original secondary accent as in America, but by shifting the main accent onward; as in *capillary* Amer. **ˈkæpəˌlɛəɹɪ,** Brit. **kəˈpɪlərɪ;** *centenary* Amer. **ˈsɛntəˌnɛəɹɪ,** Brit. **sɛnˈtinərɪ;** *corollary* Amer. **ˈkɔəəˌlɛəɹɪ,** Brit. **kəˈrɒlərɪ;** *laboratory* Amer. **ˈlæbrəˌtoəɹɪ,** Brit. **ləˈbɒrət(ə)rɪ,** also **ˈlæb(ə)rət(ə)rɪ;** *obligatory* Amer. **əˈblɪgəˌtoəɹɪ, ˈɑblɪgəˌtoəɹɪ,** Brit.

ˈɒblɪgət(ə)rɪ, ˈɒblɪgetərɪ, əˈblɪgət(ə)rɪ; in *necessary*, Brit. sometimes has **ˈnɛsɪsɛrɪ** (with enough subordinate accent on **-sɛrɪ** to preserve the full vowel **ɛ**).

118. In the retention of the secondary accent in these words, as in many other respects, American English preserves from an earlier stage of the language a feature that has become archaic in British English. At what period the secondary accent in these words ceased to be used in England is not quite certain. The practice of the poets in this respect is not wholly decisive, since they may use for the verse-stress archaic accent that has been abandoned in current speech. At any rate, the secondary accent in these words regularly appears in British verse down to the present time. Note, e.g., Spenser, *Fairie Queene*, I.iii.3.2:

For|saken, |woful, |soli|tarie |mayd.

Shakespeare, *Hamlet*, I.ii.78:

Nor |Custom|ary |suites of |solemne |Blacke.

Sidney, *Astrophel*, 15.5:

|Ye that do |diction|ary's |method |bring
|In to your |rimes.

Pope, "Eloïsa," 18:

Re|pentant |sighs, and |volun|tary |pains.

Wordsworth, "Intimations of Immortality," 56:

|Whither is |fled the |vision|ary |gleam?

Tennyson, *Queen Mary*, 4.2.4:

I |found it |all a |vision|ary |flame.

As early as Spenser, however, we find an occasional example, which may or may not represent contemporary colloquial practice, like the following from *Fairie Queene*, IV.ix.19.6:

She |was as |safe as |in a |sanctua|ry.

(rimes, |*divers|ly*:|*privi|ty*).

Keats, "Eve of St. Agnes," 16:

Knights, |ladies, |praying |in dumb |ora|tries

(rimes, *knees*:*freeze*).

Tennyson, "Dream of Fair Women," 22:

And ˌI saw ˈcrowds in ˈcolumn'd ˈsanctuaˌries

(rime, ˈ*palaˌces*).

119. The superficial methods by which school pupils are taught "correct" pronunciations in America are well illustrated by the frequent treatment of the word *dictionary*. Many of our teachers have been taught by other teachers that the pronunciation **ˈdɪkʃənˌɛɚɪ** is not quite the thing, but that **ˈdɪkʃənɚɪ** is the "correct" pronunciation. Having no background of historical knowledge of the English language, quite ignorant that the usual American pronunciation of this word and several hundred like it represents an ancient and once universal tradition, they even fail to notice that this word has been isolated from the numerous others of its class to serve as a shibboleth to slip over the fords of social insecurity, while they are still in danger because they cannot frame to pronounce in the same way the other words of the group such as *adversary*, *antiquary*, *arbitrary*, *commentary*, *customary*, *February*, *honorary*, *military*, *necessary*, *ordinary*, *allegory*, *dormitory*, *oratory*, *preparatory*, *territory*, etc., etc., which are pronounced like *dictionary* in the type of British English from which the pronunciation **ˈdɪkʃənɚɪ** has been borrowed.

120. Some other words than those ending in *-ry* show a secondary accent in American pronunciation that is absent in British. Such are words in *-ative*, as *accumulative* **əˈkɪumjəˌletɪv**, British **əˈkjumjələtɪv**, *administrative*, *communicative*, *imaginative*, *nominative*, *operative*, *remunerative*, *significative*, etc. In these, America regularly has the secondary accent. In *administrative*, *imaginative*, and *operative*, British has both pronunciations, and perhaps in some of the others.—Words in *-ony*, as *ceremony* A. **ˈsɛɚəˌmonɪ**, B. **ˈsɛrɪmənɪ**, *matrimony*, *patrimony;* in *-ature*, as *legislature*. But American and British usage agree in omitting the secondary accent from *temperature*, *miniature*, and *literature*.

Others in which American usage differs from British are: *circumstance* ˈsɚkəmˌstæns, ˈsɜkəmstəns, *controversy*, *holiday*, British ˈhɒlədɪ, -de, *miscellany*, British ˈmɪsɪlənɪ, mɪˈsɛlənɪ.

121. In other groups of words also secondary accent has disappeared in American English. Among these are words in *-able* (*-ible*, *-uble*), as *amicable*, *comparable* ˈkɑmpɚəbḷ, *lamentable* ˈlæməntəbḷ, *preferable* and many others, in which American and British pronunciation are alike. So with words in *-acy*, as *accuracy*, *confederacy*, *delicacy*, *intimacy*, *legitimacy*, *magistracy*, *obduracy* ˈɑbdjʊɚəsɪ, əbˈdɪʊɚ-; in *-ancy*, *-ency*, as *elegancy*, *relevancy*, *significancy; impotency*, *innocency*, *presidency;* with adverbs in *-ly* formed on adjectives accented on the antepenult, as *accurately*, *delicately*, *exquisitely* ˈɛkskwɪzɪtlɪ, *permanently*, *principally*, etc.

122. **Light accent** is heard in certain syllables—a stress that is below secondary accent and perceptibly above that of stressless syllables. This can be plainly detected in a word like ˌ*mis*ˌ*under*ˈ*standing*. It is clear that the main accent is on the syllable ˈstænd, and the next highest on ˌmɪs. The syllables dɚ and ɪŋ are the lowest, being without stress. Hence ˌʌn has light accent, for it is lower than ˌmɪs and higher than dɚ. So in the word *complimentation* ˌmɛn shows an accent lower than the secondary ˌkɑm and higher than the stressless plɪ. In the foregoing words, light accent is fixed by the neighboring accents. In other instances light accent is somewhat variable in strength, and often can be detected only by the quality of vowel sound in the syllable. For example, note the very light accent on -æp- in ˌædæpˈteʃən, absent in the pronunciation ˌædəpˈteʃən; or on the first syllable of veˈkeʃən, absent in vəˈkeʃən.

123. **Shifting Accent.** Certain words and phrases, chiefly adjectives and adverbs, are stressed on the last syllable when they stand alone, as *sixˈteen;* or with no following word, as *she is sixˈteen*, *years sixˈteen;* but when followed by an accented syl-

lable, the accent of the preceding word shifts, owing to the principle of rhythm; as, *ˈsixteen ˈboys and ˈgirls*. Compare *he is very exˈpert* with *an ˈexpert ˈworkman; he is here, alˈmost*, with *he is ˈalmost here*. This is especially common in adjectives accented on the last syllable, as *exˈpert*, and in compound adjectives with even accent, as *ˈlong-ˈarmed, a ˈlong-ˌarmed ˈman; ˈclose-ˈfisted, a ˈclose-ˌfisted ˈmiser*, where the second accent is changed from slightly stronger than the first to noticeably weaker, and may thus be marked with the secondary accent. For fuller treatment of shifting accent, see Webster (1934), *Pronunciation*, §66, where it is shown that hundreds of English words have no fixed accent in actual speech.

124. Sense-Stress. Sense-stress, defined in §104, in popular language is "putting the emphasis on the right words." The term applies, however, not only to the more prominent words in a statement, or any group of words that makes sense, but to all of the words, to their relative prominence or lack of prominence. We learn it from childhood, and it forms as essential a part of the expression of meaning as the words themselves. It is also closely connected with intonation, the rise and fall in pitch of the voice in speech, it being sometimes difficult to distinguish stress of force from stress of pitch.

125. The underlying principle of sense-stress is the fact that words are more prominent or less prominent according to the nature of the ideas they express. In general it is true that words which present to the mind a definite picture or idea, such as *tree, run, slow, wagon, walking, swiftly*, have relatively strong sense-stress, and words that represent vague ideas or mere relations, such as the prepositions *in, for*, etc., or conjunctions, as *and, but*, etc., or auxiliaries, as *can, has, shall*, etc., have relatively weak sense-stress. (But cf. §138.)

It would be difficult to formulate all the laws of sense-stress in English, and only a few illustrative examples will be given.

Certain combinations regularly have so-called **level stress** (see §107), in which, however, the second stress is slightly stronger than the first; as **verb+adverb** (*He ˈwent ˈfar*), **adverb+participle** (*ˈquickly ˈmade*), **adverb+adjective** (*ˈhardly ˈwise*), **adjective+noun** (*ˈlong ˈdays*) and **attributive noun+noun** (*ˈgold ˈring*), **genitive+noun** (*ˈstone's ˈthrow*), **noun subject+verb** (*the ˈhouse ˈburned, the ˈladies ˈcame*), **subject+noun or adjective predicate** (*The ˈtrees are ˈmaples, The ˈtrees are ˈtall*). In general any predicate is slightly stronger than a noun subject (*The ˈtrip was in ˈvain, The ˈman was aˈway*). Pronoun subjects and objects have less stress than nouns (cf. ˌ*He ˈsent ˌit* with ˈ*Carrie ˈsent ˈBurt*).

Fortunately it is not necessary to know all the laws of sense-stress in order to perceive it. All that is needed is a sharpened sense of accent and stress. For fuller treatment and examples of sense-stress, see Webster (1934), *Pronunciation*, §69.

126. In some instances sense-stress and the accent of compound nouns or adjectives come into conflict. For example, the sense-stress of the adjective+noun ˈ*golden ˈsun* is level stress; the accent of the compound noun ˈ*goldˌsmith* is, as regularly, primary+secondary. But in ˈ*gold ˈring* we have level stress because *gold*, though a noun, is used as an adjective, and so takes adjective+noun sense-stress. When the idea of the noun as one unit predominates, as in ˈ*redˌbird*, we have compound noun stress; when the idea of adjective followed by noun predominates, we have adjective+noun sense-stress, level stress, as ˈ*red ˈbird*.

127. So the chief factor that distinguishes real compounds (whether written solid or with hyphen or separately) from adjective+noun phrases is the stress. Thus ˈ*gold ˌdust* is a compound noun whether hyphenated or not. But since there are cases in which the idea wavers between single compound noun and adjective+noun, some cases show either accentuation; as

ˈoak ˈtree or *ˈoak|tree;* cf. *ˈapple ˈpie* with *ˈapple|tree.* Can you think of a plausible reason why we can say either *ˈoak|tree* or *ˈoak ˈtree,* but cannot say *ˈapple ˈtree,* but only *ˈapple|tree?*

128. Sense-stress is the foundation of English poetry—not merely of "accent" or "meter," but of the essence of poetry. Poetry is speech—a fact sometimes forgotten. The sense-stresses of speech determine the movements and contrasts of speech—the movements and contrasts of the thought and feeling. The poet selects and arranges those thoughts and feelings whose stress movements and contrasts make up the particular pattern of verse he has chosen. Thus the rhythm and the thought and feeling are one. The stress movements and contrasts are present, not because it is verse, but because it is speech. It is verse because the speech stresses are what they are. The verse-beats are simply the beats of the thought and feeling—the sense-stresses. There is exactly the same variety in the strength of the successive stresses of poetry that there is in the sense-stresses of living speech. Those systems of marking verse scansion that mark the verse-beats all alike obscure that fact and mislead the student. The same general statements apply to "free verse." If it has any rhythm, it is the rhythm of speech and is based on sense-stress.[52a]

129. Emphasis. The term emphasis is often loosely used of various kinds of stress. Though in its physiological and psychological nature it is the same as any stress, the term will here be limited to what may be called unusual stress, or stress for special purposes, in contrast to sense-stress, which is the normal stress of words to show the relations of meaning, and is never absent from a group of words that makes sense.

[52a] For the relation of sense-stress to poetry, see Mark Harvey Liddell, *An Introduction to the Scientific Study of English Poetry,* N. Y., 1902, and *A Brief Abstract of a New English Prosody based upon the Laws of English Rhythm,* Lafayette, Indiana, 1914.

Mr. H. O. Coleman[53] has pointed out a valuable distinction in emphasis as the **emphasis of prominence** and the **emphasis of intensity.** The emphasis of prominence gives special prominence to an idea among other ideas, and hence is most commonly used for contrast, expressed or implied; as He is *rich* but *discontented.*[54] The emphasis of intensity, on the other hand, heightens the idea of a word in itself without regard to other ideas; as We're *lost!* The emphasis of prominence might be called **logical emphasis,** and the emphasis of intensity, **emotional emphasis.**

130. Gradation. It is a characteristic of English, deeply imbedded in its long history, that the vowels of unaccented syllables have gradually become obscured to a sound quite different in resonance, or quality, from what they had formerly been, and from the present-day vowels that have preserved their full quality under accent.[55] This fact escapes the attention of many because the same spelling is kept for the obscured vowel that was used to spell it before it became obscured in course of time, and the same spelling that is also used for the accented vowel that takes its place when its syllable is accented. Thus the quite different vowel sounds in *aˈpart* are each spelt with *a;* so in *aˈlas* **əˈlæs,** *apˈpal* **əˈpɔl,** *ˌappaˈratus* **ˌæpəˈretəs.** It is only when they are expressed in phonetic symbols that it becomes clear that the vowels are really different though spelt alike.

The following tables show in the accented syllable (primary or secondary) of the first column a full vowel, and in the cor-

[53] *Miscellanea Phonetica* (IPA, 1914), pp. 6–26.

[54] The examples cited by Coleman of emphasis of prominence that are not for contrast seem to be normal sense-stress on the most important word, as in his example, I am feeling *ill.* If this is given additional emphasis, it becomes the emphasis of intensity; as Oh! I'm *ill!*

[55] The historical change of quality in unaccented vowels must not be confused with the historical change of past accented vowels to present accented vowels, the "Great Vowel Shift," as of **ɔː** to **o** (ME **stɔːn,** ModE **ston**).

responding unaccented syllable of the second column the obscured vowel that takes its place when unaccented. (After reading them through carefully, read the explanations at the end and then look them through again.)

Gradation of Vowels According to Stress

Accented syllable or stressed monosyllable		*Unaccented syllable or unstressed monosyllable*	
(1) Full Vowel		**Reduced Vowel**	
i	ˈri ˌflɛks (ˈ*re*ˌ*flex*)	ɪ	rɪ ˈflɛkt (*re*ˈ*flect*)
	kəm ˈpit (*com*ˈ*pete*)		ˌkɑm pɪ ˈtɪʃən (ˌ*compe*ˈ*tition*)
	ˌdi noˈteʃən (ˌ*deno*ˈ*tation*)		dɪ ˈnot (*de*ˈ*note*)
	ˈmi tɚ (ˈ*meter*)	ə	daɪ ˈæm ə tɚ (*di*ˈ*ameter*)
	kwaɪ ˈi təs (*qui*ˈ*etus*)		ˈkwaɪ ət (ˈ*quiet*)
ɪ	hə ˈbɪt ʃʊəl (*ha*ˈ*bitual*)	ɪ	ˈhæb ɪt (ˈ*habit*)
	pə ˈzɪʃ ən (*po*ˈ*sition*)		ˈɑpə zɪt (ˈ*opposite*)
	tə ˈrɪf ɪk (*ter*ˈ*rific*)	ə	ˈtɛɚ ə faɪ (ˈ*terrify*)
	ˈdɪv ə dɛnd (ˈ*dividend*)		də ˈvaɪd (*di*ˈ*vide*)
e	ˈde lɪ (ˈ*daily*)	ɪ	ˈmʌn dɪ (ˈ*Monday*)
	ə ˈwe (*a*ˈ*way*)		ˈɔl wɪz (ˈ*always*)
	ˈedʒ (ˈ*age*)		ˈnɑn ɪdʒ (ˈ*nonage*)
	ˈsent (ˈ*Saint*)		sɪn ˈklæɚ (*Sin*ˈ*clair*)
	ˈsɛpɚ ˌet (ˈ*sepa*ˌ*rate*)		ˈsɛpɚ ɪt (ˈ*separate*)
	ˈste bl̩ (ˈ*stable*)	ə	stə ˈbɪlətɪ (*sta*ˈ*bility*)
	ˈtʃes (ˈ*chase*)		ˈpɜ tʃəs (ˈ*purchase*)
ɛ	ˈdɛf ənɪt (ˈ*definite*)	ɪ	dɪ ˈfaɪn (*de*ˈ*fine*)
	dɪ ˈstrɛs (*dis*ˈ*tress*)		ˈmɪs trɪs (ˈ*mistress*)
	ən ˈlɛs (*un*ˈ*less*)		ˈnid lɪs (ˈ*needless*)

	prɪn ˈsɛs (*prinˈcess*)		**ˈprɪn sɪs** (*ˈprincess*)
	mo ˈmɛn təm (*moˈmentum*)	ə	**ˈmo mənt** (*ˈmoment*)
	ˈlɛnt (*ˈLent*)		**ˈsaɪ lənt** (*ˈsilent*)
	ˈkɑmplɪ ˌmɛnt (*ˈcompliˌment*)		**ˈkɑmplɪ mənt** (*ˈcompliment*)
æ	**ˈmæn lɪ** (*ˈmanly*)	ə	**ˈpost mən** (*ˈpostman*)
	ˈlænd ˌlɔɚd (*ˈlandˌlord*)		**ˈɪŋ glənd** (*ˈEngland*)
	ˈæn ˌɛks (*ˈanˌnex*)		**ə ˈnɛks** (*anˈnex*)
	ˈæd ˌɛpt (*ˈadˌept*)		**ə ˈdɛpt** (*aˈdept*)
	ˈhæmp tən (*ˈHampton*)		**ˈwɪnd əm** (*ˈWindham*)
ɑ	**ˈmɑ mə** (*ˈmama*)	ə	**mə ˈmɑ** (*ma ˈma*)
	hi ˈwɑz (*he ˈwas*)		**ˈðæt wəz ˈraɪt** (*ˈthat was ˈright*)
	ˈɑb dʒɪkt (*ˈobject*)		**əb ˈdʒɛkt** (*obˈject*)
	ə ˈpɑs l̩ (*aˈpostle*)		**ˌæp əs ˈtɑlɪk** (*ˌaposˈtolic*)
	ˈkɑn ˌdʌkt (*ˈconˌduct*)		**kən ˈdʌkt** (*conˈduct*)
ɒ	**hi ˈwɒz** (*he ˈwas*)	ə	**ˈðæt wəz ˈraɪt** (*ˈthat was ˈright*)
	ˈɒb dʒɪkt (*ˈobject*)		**əb ˈdʒɛkt** (*obˈject*)
	ə ˈpɒs l̩ (*aˈpostle*)		**ˌæp əs ˈtɒlɪk** (*ˌaposˈtolic*)
	ˈkɒn ˌdʌkt (*ˈconˌduct*)		**kən ˈdʌkt** (*conˈduct*)
ɔ	**ˈɔ θɚ** (*ˈauthor*)	ə	**ə ˈθɔɚ ətɪ** (*auˈthority*)
	ɪn ˈstɔl (*inˈstall*)		**ˌɪn stə ˈleʃən** (*ˌinstalˈlation*)
	ˈɔ fɚ (*ˈoffer*)		**ə ˈfɛnd** (*ofˈfend*)
	ˈbɔld lɪ (*ˈbaldly*)		**ˈrɪb əld** (*ˈribald*)
	ˈθiə ˌbɔld (*ˈTheoˌbald*)		**ˈtɪb əlt** (*ˈTybalt*)

o	ɪm ˈpoz (*imˈpose*)	ə	ˌɪm pə ˈzɪʃən (*ˌimpoˈsition*)
	ɪn ˈvok (*inˈvoke*)		ˌɪn və ˈkeʃən (*ˌinvoˈcation*)
	mɪl ˈto nɪən (*MilˈtonianMilˈtonian*)		ˈmɪl tən (*ˈMilton*)
	ˈrop (*ˈrope*)		ˈstɜ əp (*ˈstirrup*)
	ˈfok (*ˈfolk*)		ˈnɔɚ fək (*ˈNorfolk*)
ʊ	ˈfʊl nɪs (*ˈfullness*)	ə	ˌkæɚ fəl (*ˈcareful*)
	ˈʃʊd ṇt (*ˈshouldn't*)		ˌwi ʃəd ˈgo (*ˌwe should ˈgo*)
	ˈæmˌbʊʃ (*ˈamˌbush*)		ˌæm bəs ˈked (*ˌambusˈcade*)
u	ˈtu ən ˈfro (*ˈto and ˈfro*)	ə	tə ˈnaɪt (*toˈnight*)
	ˈru mɪ (*ˈroomy*)		ˈbɛd rəm ˈdoɚ (*ˈbedroom ˈdoor*)
	ˈdu ˈɔl (*ˈdo ˈall*)		ˈhaʊ dəz ɪt ˈgo (*ˈhow does it ˈgo?*)
	ˈdum (*ˈdoom*)		ˈkɪŋ dəm (*ˈkingdom*)
ɜ	kən ˈvɜs (*conˈverse*)	ɚ	ˌkɑn vɚ ˈseʃən (*ˌconverˈsation*)
	ˈpɜ sṇ (*ˈperson*)		pɚ ˈsɑn əfaɪ (*perˈsonify*)
	ˈsɜ ˌve (*surˌvey*)		sɚ ˈve (*surˈvey*)
	ˈfɜm (*ˈfirm*)		ˌkɑn fɚ ˈmeʃən (*ˌconfirˈmation*)
ɜ	kən ˈvɜs (*conˈverse*)	ə	ˌkɒn və ˈseʃən (*ˌconverˈsation*)
	ˈpɜ sṇ (*ˈperson*)		pə ˈsɒn əfaɪ (*perˈsonify*)
	ˈsɜ ˌve (*surˌvey*)		sə ˈve (*surˈvey*)
	ˈfɜm (*ˈfirm*)		ˌkɒn fə ˈmeʃən (*ˌconfirˈmation*)

ʌ	ˈʌpɚ (ˈ*upper*)	ə	ə ˈpɑn (*up*ˈ*on*)
	kən ˈsʌlt (*con*ˈ*sult*)		ˌkɑn səl ˈteʃən (ˌ*consul*-ˈ*tation*)
	sɚ ˈkʌm fɚəns (*cir*ˈ*cum*-*ference*)		ˌsɜ kəm ˈskraɪb (ˌ*circum*ˈ*scribe*)
	ˈkʌm pənɪ (ˈ*company*)		kəm ˈpænjən (*com*ˈ*panion*)
	ˌʌn ˈdʌn (ˌ*un*ˈ*done*)		ən ˈles (*un* ˈ*less*)
aɪ	ˈmaɪ ˌgret (ˈ*mi*ˌ*grate*)	ə	ˌɛm ə ˈgreʃən (ˌ*emi*ˈ*gration*)
	ə ˈblaɪdʒ (*o*ˈ*blige*)		ˌɑb lə ˈgeʃən (ˌ*obli*ˈ*gation*)
	ˈbaɪ ˌpæθ (ˈ*by*ˌ*path*)		ˈtu bə ˈtu (ˈ*two by* ˈ*two*)
aʊ	ˈfaʊnd (ˈ*found*)	ə	ˌnɪʉ fənd ˈlænd (ˌ*Newfound*ˈ*land*)
	ˈmaʊθ ˌfʊl (ˈ*mouth*ˌ*ful*)		ˈpoɚts məθ (ˈ*Portsmouth*)
	ˈtaʊn (ˈ*town*)		ˈwɑʃɪŋ tən (ˈ*Washington*)
	ˈhaʊs (ˈ*house*)		ˈlɪm əs (ˈ*Limehouse*)
ɪʉ, jʉ	ˈtɪʉn (ˈ*tune*)	ə	ˈfɔɚ tʃən (ˈ*fortune*)
	ˈdɪʉk (ˈ*duke*)		ˈɛd ʒə ket (ˈ*educate*)
	ˈsɪʉ pɚfaɪn (ˈ*superfine*)		sə ˈpɪɚ ɪ-ɚ (*su*ˈ*perior*)
	sə ˈlɪʉt (*sa*ˈ*lute*)	jʊ	ˌsæl jʊ ˈteʃən (ˌ*salu*ˈ*tation*)
	ˌkɑntɪ ˈnɪʉ ətɪ (ˌ*conti*ˈ*nuity*)		kənˈtɪn jʊd (*con*ˈ*tinued*)
	ˈjʉn jən (ˈ*union*)		jʊ ˈnaɪt (*u*ˈ*nite*)

Centering Diphthongs

ɪə	rɪ ˈvɪə (*reˈvere*) ˈmɪə ɪkl̩ (ˈ*miracle*)	ə	ˈrɛv ə ənt (ˈ*reverent*) məˈ(r)ækjələs (*miˈraculous*)
ɛə	ɪn ˈtɛə əˌget (*inˈterroˌgate*) ˈmɛə ɪ (ˈ*Mary*) bɑəˈbɛə ɪən (*barˈbarian*) ˈblæk ˌbɛə ɪ (ˈ*blackˌberry*)	ə	ˌɪn tə ˈ(r)ɑgətɪv (ˌ*interˈrogative*) məˈ(r)aɪə (*MaˈRia*) ˈbɑə bə əs (ˈ*barbarous*) ˈblæk bə ɪ (ˈ*blackberry*)
æə	ˌsɪmə ˈlæə ətɪ (ˌ*similˈlarity*) tɑəˈtæə ɪk (*tarˈtaric*) ˈpæə ənt (ˈ*parent*) grəˈmæə ɪən (*gramˈmarian*) prɪˈpæə (*preˈpare*)	ə	ˈsɪmə lə (ˈ*similar*) ˈtɑə tə (ˈ*tartar*) pəˈ(r)ɛntl̩ (*paˈrental*) ˈgræm ə (ˈ*grammar*) ˌprɛp əˈ(r)eʃən (ˌ*prepaˈration*)
ɑə	ˈpɑət lɪ (ˈ*partly*) ˈnɑəd (ˈ*nard*) ˈjɑəd (ˈ*yard*) ˈgɑəd (ˈ*guard*)	ə	pəˈtɪkjələ (*parˈticular*) ˈspaɪk nəd (ˈ*spikenard*) ˈɔə tʃəd (ˈ*orchard*) ˈblæg əd (ˈ*blackguard*)
ɔə	rɪ ˈkɔəd (*reˈcord*) ˈwɔə dn̩ (ˈ*warden*) ˈfɔə (ˈ*for*) ˈbɔən (ˈ*born*)	ə	ˈrɛk əd (ˈ*record*) ˈwʊd (w)əd (ˈ*Woodward*) fəˈɛvə (*forˈever*) ˈfri bən (ˈ*Freeborn*)
oə	ˈboəd (ˈ*board*) ˈfoəd (ˈ*ford*)	ə	ˈkʌb əd (ˈ*cupboard*) ˈbɛd fəd (ˈ*Bedford*)

	ɪg ˈnoɚ (*igˈnore*) ˈstoɚ ɪ (ˈ*story*)		ˈɪg nɚ ənt (ˈ*ignorant*) ˈhɪs tɚ ɪ (ˈ*history*)
ʊɚ	ˈjʊɚz (ˈ*yours*) ˈʃʊɚ (ˈ*sure*) ˈmʊɚ (ˈ*moor*)	ɚ	ˈhɪɚz jɚ ˈhæt (ˈ*here's your* ˈ*hat*) ˈprɛʃ ɚ (ˈ*pressure*) ˈkræn mɚ (ˈ*Cranmer*)
aɪɚ	əd ˈmaɪɚ (*adˈmire*) ˈʃaɪɚ (ˈ*shire*)	ɚ	ˌæd mɚ ˈ(r)eʃən (ˌ*admi-*ˈ*ration*) ˈnɪʉ ˈhæmp ʃɚ (ˈ*New* ˈ*Hampshire*)
ɪʉɚ	sʌl ˈfɪʉɚ ɪk (*sulˈphuric*)	ɚ	ˈsʌl fɚ (ˈ*sulphur*)

	(2) Full Vowel		Lost Vowel
i	ˈfoɚ ˈtin (ˈ*fourˈteen*)	( )	ˈfɔɚt ˌnaɪt (ˈ*fort*ˌ*night*)
ɪ	ə ˈbɪl ətɪ (*aˈbility*) sɪ ˈvɪl jən (*ciˈvilian*) jʉ ˈtɪl ətɪ (*uˈtility*) læ ˈtɪn ətɪ (*Laˈtinity*)	( )	ˈe bl̩ (ˈ*able*) ˈsɪv l̩ (ˈ*civil*) ˈjʉ tl̩ aɪz (ˈ*utilize*) ˈlæt n̩ (ˈ*Latin*)
e	rɪ ˈmen (*reˈmain*) rɪ ˈten (*reˈtain*) ˈdel (ˈ*dale*)	( )	ˈrɛm nənt (ˈ*remnant*) ˈrɛt n̩ ʉ (ˈ*retinue*) ˈtwi dl̩ (ˈ*Tweedle*)
ɛ	po ˈtɛn ʃəl (*poˈtential*) rɪ ˈbɛl (*reˈbel*)	( )	ˈpo tn̩t (ˈ*potent*) ˈrɛb l̩ (ˈ*rebel*)
æ	fe ˈtæl ətɪ (*faˈtality*) se ˈtæn ɪk (*saˈtanic*)	( )	ˈfe tl̩ (ˈ*fatal*) ˈse tn̩ (ˈ*Satan*)

ɑ	ˌæp əs ˈtɑl ɪk (*ˌapos ˈtolic*)	( )	ə ˈpɑs l̩ (*a ˈpostle*)
	tɪʉ ˈtɑn ɪk (*Teu ˈtonic*)		ˈtɪʉ tn̩ (*ˈTeuton*)
	kʊd ˈnɑt (*could ˈnot*)		ˈkʊd n̩t (*ˈcouldn't*)
	pɚ ˈsɑn ə faɪ (*per ˈsonify*)	( )	ˈpɝ sn̩ (*ˈperson*)
ɔ	ˈfɔl (*ˈfall*)	( )	ˈɔf l̩ (*ˈoffal*)
	ˈstɔl (*ˈstall*)		ˈpɛdɪs tl̩ (*ˈpedestal*)
o	ˈmɑn ə ˌton (*ˈmono ˌtone*)	( )	mə ˈnɑt n̩ əs (*mo ˈnotonous*)
	ˈston (*ˈstone*)		ˈθɝs tn̩ (*ˈThurston*)
	dʒɑn ˈso nɪən (*John ˈsonian*)		ˈdʒɑn sn̩ (*ˈJohnson*)
ʊ	ˈfʊl (*ˈfull*)	( )	ˈɔ fl̩ ɪ (*ˈawfully*)
	ˈbʊl (*ˈbull*)		ˈtrʌm bl̩ (*ˈTrumbull*)[56]
ʌ	ˈsʌn (*ˈson*)	( )	ˈwɪl sn̩ (*ˈWilson*)
	dɪ ˈsʌl tɚ (*de ˈsultor*)		ˈdɛs l̩ ˌtoɚ ɪ (*ˈdesul ˌtory*)
ɝ	ˈθɝ mə ˌstæt (*ˈthermo ˌstat*)	( )	θm̩ ˈɑmətɚ (*ther ˈmometer*)
aʊ	ˈtaʊn (*ˈtown*)	( )	ˈbraɪ tn̩ (*ˈBrighton*)
ɪʉ	ˈtɪʉn (*ˈtune*)	( )	ˈfɔɚ tʃn̩ ɪtlɪ (*ˈfortunately*)

131. Not all of these pairs of stressed and stressless vowels represent the same historical stage of obscuration of the un-

[56] It is not certain that *Trumbull* is derived from *bull*, but it is certain that they had the same vowel ʊ in or before the 14th c. An earlier form is *Turnbull*. Account for the change to *Trumbull*.

accented vowel. The most of them show what each accented vowel at the present time becomes when it loses its accent; as **ˈde lɪ—ˈmʌn dɪ,** or **mo ˈmɛn təm—ˈmo mənt.** But in some cases the obscure vowel represents a reduced pronunciation of the corresponding accented vowel at an earlier period, as in **ˈtaʊn—ˈwɑʃɪŋtən,** in which the unaccented vowel began to be obscured at a time before the accented vowel became **aʊ,** while it was still **uː.** The stages of obscuration then were **ˈtuːn—tun—tʊn—tən.** But when **ˈtuːn** kept its accent it became **ˈtaʊn** by the Great Vowel Shift. So in the pair **ˈmæn—ˈpost mən** it is probable that **mən** is the reduced form, not directly of **ˈmæn,** but of its earlier stage **ˈmɑn.** In loan-words from French or Latin the correspondence of the stressed and unstressed vowel may in some cases go back to a period before they were taken into English. But the principle is the same in all cases, the difference in vowel being a regular accompaniment of the difference in accent, the same original vowel developing differently when accented and when unaccented.[57] In some examples a different word is used, but the vowels correspond. Thus in *unless* the ending *-less* is not the same as that in *needless;* but the vowels (accented **ɛ,** unaccented **ɪ**) correspond. So *Lent* is not the same word as the last syllable of *silent,* or *bald* as that of *ribald;* but the vowels correspond. If the accent were put on the last syllable of these words, they would be **səˈlɛnt** and **rɪˈbɔld.**[58]

132. Our custom of spelling with the same letter such vowel

[57] It is not entirely certain that accent or the lack of it *causes* the change in vowel quality. It is possible that the accent is as much a result of the difference in vowel quality as a cause of it; i.e., that vowel quality is a constituent of accent (prominence). It has not, I think, yet been shown that full vowel quality exists in English under the lowest grade of stress. Such so-called unaccented vowels as **ɑ** in **ˈkænɑt,** **ʊ** in **ˌsæljʊˈteʃən,** the second **æ** in **ˌædæpˈteʃən,** can be pronounced with less prominence, as obscure vowels: **ˈkænət** (cf. **kænt**), **ˌsæljəˈteʃən, ˌædəpˈteʃən;** and even **ˌsɪtʃʊˈeʃən** can be reduced to **ˌsɪtʃəˈweʃən.**

[58] A radio announcer introducing grand opera said **rɪˈbɔldrɪ.**

sounds as the second one in *momentum* and the last one in *moment*, the first in *manly* and the last in *postman*, the last in *re|cord* (vb.) and *|record* (noun), the first in *|object* (noun) and *ob|ject* (vb.), has firmly fixed in our consciousness the entirely erroneous idea that they are the same vowel sound in each pair of words. In reality they are as different as if they were spelt with different letters. The last vowel in *moment* is more different from the second vowel in *momentum* than the vowel of *feel* is from the vowel of *fate*.

133. In the examples given, the corresponding syllables have virtually the same quality of vowel sound under secondary accent as under primary. In most cases, too, a similar quality of vowel sound is found under light stress, but with greater laxness and brevity; though under very light stress some vowels tend to become obscure with loss of their distinctive quality.

134. But when the vowel is without stress, we find, e.g., that the sound which is **e** when accented, as in *daily* **ˈdelɪ**, is **ɪ** when unaccented, as in *Sunday* **ˈsʌndɪ**; or the vowel that is **o** when accented, as in *revoke* **rɪˈvok**, is replaced by **ə** when unaccented in *advocate* **ˈædvəˌket**; or what is **æ** in the accented syllable of *manly* **ˈmænlɪ**, becomes **ə** in the unaccented syllable of *postman* **ˈpostmən**; or what is **ɔɚ** in the accented syllable of *record* **rɪˈkɔɚd**, becomes **ɚ** in the unaccented syllable of *record* **ˈrɛkɚd**. In the examples given, note that all accented vowels (with a few exceptions to be noted below), when they lose their accent, become one of the three unstressed vowels **ɪ**, **ə**, **ɚ**. In regions where *r* is silent except before vowels the accented vowels of words like *re|cord*, *|person*, which are there pronounced **rɪˈkɔ(ə)d** and **ˈpɜsn̩**, are replaced in *|record* and *per|sonify* by the unaccented **ə**, **ˈrɛkəd**, **pəˈsɒnəfaɪ**.

135. In general it is seen that the high-front vowels **i**, **ɪ**, the mid-front **e**, and usually **ɛ**, when they lose their accent are replaced by the front vowel **ɪ**, and that the low-front **æ**, all the

central vowels, and all the back vowels are replaced, when unaccented, by the mid-central **ə**. There is a further tendency in popular speech for the high-front vowels, when unaccented, also to become retracted and lowered beyond **ɪ** to **ə**. This has found its way into general cultivated speech in some words, as in *possible*, *enough*, etc., and the tendency seems to be increasing.

136. It is sometimes thought that the substitution in unaccented syllables of **ɪ** for **i, e, ɛ** of accented syllables, as seen in comparing *decompose* **ˌdi kəmˈpoz** with *define* **dɪˈfaɪn,** or the substitution of **ə** for other accented vowels, as seen in comparing *object* **ˈɑbdʒɪkt** with *object* **əbˈdʒɛkt,** or *revoke* **rɪˈvok** with *advocate* **ˈædvəˌket,** is an evidence of slovenly and vulgar pronunciation. This idea is erroneous, resulting partly from our imperfect system of spelling, and partly from the misguided efforts of some well-meaning teachers not sufficiently acquainted with the history and laws of the English language. Not only are the unaccented sounds **ɪ, ə, ɚ** universally in actual use in the unaffected speech of cultivated people of England and America, but this fact is an instance of one of the most interesting and important laws of the branch of the Indo-European language to which English belongs. The tables show three grades of vowel quality corresponding to differences in accent—(1) **Full grade** (as **ɛ** in **mo ˈmɛn təm**), (2) **Reduced grade** (as **ə** in **ˈmo mənt**), and (3) **Lost grade** (as shown in **ˈbraɪ tn̩,** where syllabic **n̩** replaces the vowel; sometimes the syllable also is lost, as in **ˈfɔɚtˌnaɪt** compared with the full grade in **ˈfoɚ ˌtin ˈnaɪt**). These grades correspond in a general way to different grades in the early stages of Indo-European of what is called **ablaut** (**ˈɑbˌlaʊt,** German **ˈɑpˌlaʊt**). The results of IE ablaut as it operated in verbs can now be seen in the parts of the verb *sink*, *sank*, *sunk*, of which the forms *sink*, *sank* represent the full grade, with accented vowel, and *sunk* (earlier *sunken*) represents the lost

grade (formerly with the first syllable unaccented and without vowel, the ŋ being syllabic). Later the accent was shifted to the first syllable by recessive accent (see §114), and **uŋ** took the place of syllabic ŋ, later changing to **ʌŋ**. For further comment on the pronunciation of obscure vowels in standard English, see §320.

137. Words Having Both Stressed and Unstressed Forms.— Owing to the principle of gradation of vowels according to stress, a group of short words, chiefly monosyllables, frequently used as connectives, prepositions, auxiliaries, etc., **though having only one spelling form, in actual speech exist in two or more forms** according to whether or not they have sense-stress. Thus in *He has money*, *has* is the main verb of the sentence, and therefore has strong sense-stress. Hence it has its full vowel **hæz.** But in *John has gone*, *has* is a mere auxiliary, the meaning of the main verb being contained in *gone*, which therefore has the sense-stress of the verb while *has* is without any. In speech, therefore, the second *has* is not **hæz,** but **həz, əz, z: hi həz gɔn, hi əz gɔn, hiz gɔn.** The student should rid himself of the prevalent notion that these are merely careless pronunciations. On the contrary, they are universal in cultivated speech that is not artificial.

Following is a list of stressed and unstressed forms. It should be remembered that the unstressed forms are those of unconscious speech. The moment we try to pronounce some of the unstressed forms consciously and out of their place in the sentence, we stress them, thus restoring the full vowel of the strong form. It is customary, when mentioning isolated words, to pronounce their stressed form, as *a* **e,** *an* **æn,** *the* **ðiː.** These are rare forms in actual speech, and the mistake must not be made of pronouncing the isolated form either in ordinary speech or when mentioning them in phrases or sentences, unless the sense requires the stressed form.

Stressed and Unstressed Monosyllables of Speech

Spelling	Stressed Form		Unstressed Form	
a	e	(rare) ˈe ˌmæn, nɑt ˈtu ˌmɛn	ə	ə ˈtɔl ˈmæn
an	æn	(rare) ˈæn ˌɛg, nɑt ˈtu ˌɛgz	ən	ən ˈold ˈmæn
			ṇ	ˈgɑt ṇ ˈæpḷ?
am	æm	ɪnˈdid, aɪ ˈæm	əm	ˌaɪ əm ˈrɛdɪ
'm			m	aɪm ˈrɛdɪ
and	ænd	ˈænd, ɪnˈdid, aɪ ˈʃʊd	ənd	ˈsno ənd ˈaɪs
	æn	ˈboθ ˌdʒɑn ˈæn ˌdʒemz	ən	ˈkʌp ən ˈsɔsɚ
			ṇd	ˈhɛd ṇd ˈɑɚm
			ṇ	ˈrɑd ṇ ˈgʌn
			ŋ	ˈdʒæk ŋ ˈket
			ṃ	ˈʌp ṃ ˈdaun
are	ɑɚ	ˈjɛs, ðe ˈɑɚ	ɚ	ˈɔl ɚˈmɔɚtḷ
're		(nonsyllabic)	ɚ	ˌðeɚ ˈhɪɚ
as	æz	ˌæz i ˈkem	əz	ˈdʒʌst əz ˈgʊd
			z	ˈnɑt sə ˈgʊd z ɪt ˈwɑz
			s	ˈnɑt sə ˈlaɪt s ɪt ˈlʊks
at	æt	ˈmed tə ˈlʊk ˌæt	ət	ˈlʊk ət ðə ˈhaʊs
be	bi	ˈhaʊ kən ɪt ˈbi?	bɪ	ɪt ˈkʊdṇt bɪ ˈdʌn
but	bʌt	ˈbʌt, ju ˌsi, aɪ ˈdɪd	bət	ˈɔl bət ˈtu
by	baɪ	ðe ˈdroʊ ˈbaɪ	bəɪ	bəɪ ˈɔl ˈmɪnz
			bə	ˈtu bə ˈtu (chiefly+cons.)
			bɪ	(occas. Brit. form; cf. *my*)
can	kæn	du ˈɔl ju ˈkæn	kən	ˌhi kən ˈsi ɪt
			kṇ	ˌaɪ kṇ ˈdu ɪt
			kŋ	ˌaɪ kŋ ˈkɔl ɪm (esp.+k, g)
could	kʊd	ɪf ju ˈonlɪ ˈkʊd	kəd	ˌhi kəd ˈdu ɪt əˈlon
do	du	ˈhaʊ ʃəl aɪ ˈdu ɪt?	du	ˈhaʊ du ˈaɪ ˌno? (+vowel)
			də	ˈhwɑt də ðe ˈwɑnt? (+cons.)
does	dʌz	aɪ səˈpoz i ˈdʌz	dəz	ˈhaʊ dəz ɪt ˈgo?
'em	No stressed form. For a stressed form a different word, *them*, is used. See *them*, below.		əm	hi ˈtold əm tə ˈkʌm
			ṃ	ˈkip ṃ ˈwɔɚm
for	fɔɚ	ˈhu ɪz ɪt ˈfɔɚ?	fɚ	ˈwet fɚ ˈælɪs
from	frɑm	ˈhwæɚ dɪd i ˈkʌm ˌfrɑm?	frəm	hi ˈkem frəm ˈtaun
had	hæd	ɪt wəz ˈɔl i ˈhæd	həd	ðe həd ˈgən ɔlˈrɛdɪ

Spelling	Stressed Form		Unstressed Form	
'd			əd	ðə ˈmæn əd ˈgɔn
			d	hid ˈgɔn hwɛn aɪ ˈkem
has	hæz	hi ˈhæz ðə ˈbʊk	həz	ˈmɑɚθə həz ˈfaʊnd ɪt
			əz	ˈdʒɔɚdʒ əz ˈkʌm; ˈgres əz ˈkʌm; ˈtʃɝtʃ əz bɪˈgʌn; ˈroz əz ˈkʌm
's			z	(after voiced sounds exc. sibilants) hiz ˈdʒʌst ˈkʌm; ˈdʒɑnz ˈdʒʌst ˈkʌm
			s	(after voiceless sounds exc. sibilants) ˈdʒæks ˈkʌm
have	hæv	ˈlɛt mɪ ˈhæv ɪt	həv	ˌðe həv ˈʃʊɚlɪ ˈkʌm
've			əv	ðe ˈwʊdn̩t əv ˈgɔn
			v	aɪv ˈlɔst ɪt

NOTE: The unstressed form ə is heard in rapid familiar speech before consonants; as ˌhi kəd ə ˈgɔn. In Early Modern it was common in cultivated speech and writing.

he	hi	ˌhi ənd aɪ ˈwɛnt	i	ðe ˈθɪŋk i ˈɪz
			ɪ	ðe ˈθɔt ɪ ˈdɪd

NOTE: *He, her,* and *his* are never entirely unstressed at the beginning of a phrase: hi ˈsɛd i ˈwʊd.

her	hɝ	ðæts ˈhɝ ˌbʊks, nɑt ˈhɪz	hɚ	hɚ ˈmʌðɚ wəz ˈglæd
			ɚ	ʃi ˈmɛt ɚ ət ðə ˈsteʃən
him	hɪm	ˈgɪv ɪt tə ˈhɪm, nɑt ˈmi	ɪm	aɪ ˈmɛt ɪm ɪn ˈtaʊn
his	hɪz	ɪts ˈmaɪn, nɑt ˈhɪz	ɪz	ˈɔl ɪz ˈfrɛndz wɚ ˈhɪɚ
I	aɪ	ˌaɪ ˈsɔ ɪm ət ˈtʃɝtʃ	ə	(in rapid speech) ˌaɪ ˈdɪd ɔlə ˈkʊd
in	ɪn	ˈlɛt mɪ ˈɪn	n̩	ˈbrek ɪt n̩ ˈtu (occasional)
into	ɪntu	ɪt ʃəd bi ˈlʊkt ˈɪntu	ɪntʊ	ɪt ˈlɛd ɪntʊ ən ˈælɪ
			ɪntə	hi ˈwɔkt ɪntə ðə ˈgɑɚdn̩
is	ɪz	aɪ ˈθɪŋk i ˈɪz	ɪz	ðə ˈgræs ɪz ˈwɛt; ðɪ ˈɛdʒ ɪz ˈdʌl
's			z	(after voiced sounds exc. sibilants) ˈdʒɑnz ˈhɪɚ; ˈdʒoz ˈhɪɚ
			s	(after voiceless consonants exc. sibilants) ˈdʒæks ˈhɪɚ

NOTE: After **s** or **z**, instead of the unstressed form **ɪz**, sometimes the final sound of the preceding word is lengthened or doubled; as **ðɪs-s ə faɪn de; roz-z ə laɪvlɪ gɜl.** After **ʃ**, **s** is added in the same syllable; as, **ðɪs dɪʃs hɑt;** and after **ʒ**, **z** is added likewise; as, **ðə gəɑʒz ɛmptɪ.** Apparently this does not happen after **tʃ** and **dʒ.**

Observe that two unstressed forms of *is* (**s** and **z**) are identical with two of *has* (**s** and **z**). In **hiz kʌm, dʒæks kʌm,** it is impossible to tell whether the auxiliary verb is *has* or *is*. Originally, with the verbs *come, go, lie, sit,* and other intransitive verbs of motion, the auxiliary was *is*. *Has*, which was originally used only with transitive verbs, came later to be used also with intransitives.

it	ɪt	ˈjɛs, ˈðæts ˈɪt	ɪt	ˌhwɑt ˈɑv ɪt?
't			t	ɪf twɚ ˈmaɪn, aɪd ˈsɛl ɪt

NOTE: The form *'tis* **tɪz** is used only under some stress. The usual unstressed combination is *it's* **ɪts**; as, **ɪts ə ˈgʊd ˈθɪŋ. ˈjɛs, ˈtɪz. tɪz ə ˈgʊd ˈθɪŋ** is now archaic or dialectal. The same distinction holds for stressed *'twill* **twɪl** and unstressed *it'll* **ɪtl̩; ɪtl̩ bi ə ˈgʊd ˈθɪŋ. ˈjɛs, ˈtwɪl.** However, the form *t'll* **tl̩** is common in familiar speech; as, **tl̩ bi ə ˈgʊd ˈθɪŋ.** Apparently unstressed *'twould* **twʊd** and *it'd* **ɪtəd** are interchangeable; as, **twʊd bi ə ˈgʊd ˈθɪŋ,** or **ɪtəd ˈbi ə ˈgʊd ˈθɪŋ.** For other similar combinations, see Webster (1934), *Pronunciation* §71.

may	me	ɪt ˈme bɪ ˈso	mɪ	ˈju mɪ ˈæsk ɪm
			mə	ju mə ˈgo ˌnaʊ
me	mi	ˈgɪv ɪt tə ˈmi, nɑt ˈhɪm	mɪ	hi ˈtraɪd tə ˈsi mɪ
must	mʌst	wil ˈdu ɪt ɪf wɪ ˈmʌst	məst	ju məst ˈæsk ɪm (+vowel)
			məs	wi məs ˈgo ət ˈwʌns (+cons.)
my	maɪ	ðæts ˈmaɪ ˌbʊk	məɪ	(+vowel) aɪ ˈsɔ məɪ ˈʌŋkl̩
			mə	(+cons.) ˈpliz gɛt mə ˈkot
			mɪ	(occasional British; an archaic form, shortened from *my* when it was pronounced **miː**)[59]
no (adj.)	noː	ˈno ˈren ˌfɛl	no, nə	(adv.) no ləŋgɚ truː; hiz ˈgɑt nə ˌmoɚ ðən ˈwi
nor	nɔɚ	ˈnɔɚ, æz ɪt ˈɪz, kən ˈwi	nɚ	niðɚ ˈfɪʃ nɚ ˈflɛʃ
not	nɑt	hiz ˌnɑt ˈhɪɚ jɛt		

[59] See Daniel Jones's interesting note on *my* (*Phonetics*, 1932, §473).

Spelling	Stressed Form	Unstressed Form	
n't	(only after auxiliary verbs)	ṇt	(after cons.) **dʌzṇt, dʒsṇt, dɪdṇt, hædṇt, hævṇt, hæzṇt, ɪzṇt, kʊdṇt, maɪtṇt, mʌsṇt, ɔtṇt, ʃʊdṇt, wɑzṇt, wʊdṇt**
		nt	(after vowels) **ɑəntdæəntdontmentfæntwɜntwʌntwont**
't		t	**kænt**
		ṇ	(occas.+cons.) **hi hæzṇ ˈkʌm; hi kʊdṇ ˈdu ɪt; hi wʊdṇ ˈtraɪ**

NOTE: In the combination of auxiliary and *not*, sometimes the auxiliary is unstressed, and sometimes the negative; as **ðev ˌnɑt ˈgɔn jɛt**, or **ðe ˌhævṇt ˈgɔn jɛt; hiz ˌnɑt ˈhɪə**, or **hi ˌɪzṇt ˈhɪə**. The unstressed ṇt seems to be more informal. The two ways are traditional and utilized by poets; cf. Keats:

She ˈcannot fade, though thou hast ˈnot thy bliss.

of	**ɑv**	**ˌhwɑt ˈɑv ɪt?**	**əv**	**ðɪ ˈɛnd əv ðə ˈwik**
'o			**ə**	**ˈtɛn əˈklɑk** (frequent+cons. in very informal speech; as, **ə ˈlɔd ə ˈwʊd; ə ˈglæs ə ˈmɪlk**)

NOTE: Observe that one unstressed form of *have* (**əv**) in cultivated speech is exactly like the usual unstressed form of *of* (**əv**). Hence when the schoolboy writes *I wouldn't of gone*, he is not making a mistake in grammar, but merely in spelling. The two expressions *I wouldn't have gone* and *I wouldn't of gone* are exactly alike in standard pronunciation. To pronounce *have* and *of* differently in sentences that require the unstressed forms, would be a worse blunder than to misspell *have*. Some writers try to give a dialect tinge to the speech of their characters by representing them as saying "I wouldn't of gone." This is silly, and shows ignorance of standard English pronunciation. The same statement applies to the use of such pseudo-dialect spellings as *sez, wuz, iz, kumz*, etc., which are good (though unconventional) spellings for as good pronunciations as such authors themselves could muster.

Spelling	Stressed Form		Unstressed Form	
on	ɑn	ðə ˈbætˌlz ˈɑn; ˌɑn ə ˈrʌn; ˌɑn ˈfaɪɚ; hi ˈwɛnt ˌɑn ə ˈhʌnt		
a-			ə	ðe ˈkem ə ˈrʌnɪŋ; ðə ˈhaʊs ɪz əˌfaɪɚ; hi ˈwɛntə ˈhʌntɪŋ
one	wʌn	ˈhwɪtʃˈwʌn?	wən	aɪ ˈwɑnt ˈðæt wən
or	ɔɚ	ˈɔɚ, ɪf ˈnɑt, ˌtek ˈðɪs	ɚ	ˈwʌn ɚ ðɪ ˈʌðɚ
pretty	prɪtɪ	ə ˈprɪtɪ ˈgɜl	pɚtɪ	pɚtɪ ˈwɛl, ˌθæŋk jʊ (the vowel ɚ here is practically a retroflex ɪ)
Saint	sent	ˈsent ˈpitɚ	sənt, sən	sənt ˈæn; sən ˈdʒemz
			sɪnt, sɪn	sɪnt ˈɔdrɪ; sɪn ˈdʒɒn
			sn̩	sn̩ ˈdʒɒn (unstressed forms chiefly British)
shall	ʃæl (formerly ʃɔl, riming with *all* in "John Gilpin's Ride")	aɪ ˈθɪŋk aɪ ˈʃæl	ʃəl	ˌwiʃəl biˈrɛdɪ
			ʃl̩	ˌaɪʃl̩ biˈglæd təˈgo
she	ʃi	aɪ ˈsɔ ɪm bɪfoɚ ˈʃi dɪd	ʃɪ	aɪ ˈθɔtʃɪ ˈmɛnt ɪt
should	ʃʊd	aɪ ˈθɪŋk juˈʃʊd	ʃəd	ˌaɪʃəd bɪˈglæd ˌtu
			ʃd	(familiar) aɪʃd-ˈdu ɪt
			ʃt	(familiar) aɪʃt ˈθɪŋk so
sir	sɜ	ˈno, ˈsɜ!	sɚ	sɚ ˈrɑbɚt; ˈθæŋk jʊ, sɚ
so	so	ˈso ðe ˈsɛd	sə	ɪts ˌnɑt sə ˈkold təˌde[60]
some	sʌm	ˈsʌm ɚ ˈbɛtɚ ðən ˈʌðɚz	səm	ˈlɛts ˈhæv səm ˈaɪsˈkrim
			sə	(before m) ˈhæv sə ˈmoɚ

NOTE: Observe the correspondence between the stressed form of *one* **wʌn** and stressed **sʌm**: (sg.) ˈwʌn ˌmæn ˈsmoks, əˈnʌðɚ ˈdʌzn̩t: (pl.) ˈsʌm ˌmɛn ˈsmok, ˈʌðɚz ˈdont; and between ə (historical unstressed form of **wʌn**) and **səm** (unstressed form of **sʌm**): (sg.) aɪ ˈmɛt ə ˈmæn: (pl.) aɪ ˈmɛt səm ˈmɛn. The form **səm** is also used with mass-words that do not take ə; as, **səm ˈti, səm ˈhwit. səm** never stands alone; cf. ˈhæv səm ˈti. ˈθæŋks, aɪl ˈhæv ˌsʌm, and ˈhæv ə ˈkek. ˈθæŋks, aɪl ˈhæv ˌwʌn. But **wən** can stand alone (ˈðæts ə ˈfaɪn wən), and its plural is **wənz** (ˈðoz ɚ ˈnaɪs wənz).

[60] *So* has been weakened several times in the course of its history. It was originally **swɑ:**, and successively **sɑ:, sɔ, sə, s, z.** The last form is preserved in *as* **æz, əz,** formerly **ɑl swɑ:, ɑlsɔ, ɑlsə, ɑls, ɑs, ɑz, əz.**

Spelling	Stressed Form		Unstressed Form	
than	ðæn	(rare) əz ˈgʊd ˌæz, ɚ ˈbɛtɚ ˌðæn	ðən, ðn̩	ˈmoɚ ðən ˈɛvɚ; ˈmoɚ ðn̩ ˈɛvɚ
			n̩	(familiar) ɪts ˈlɛs n̩ ən ˈɪntʃ
			n	(familiar) ˈðæts ˈmoɚ n ˈaɪ no
that	ðæt	(demonstrative) ˈðæts ˈɔl	ðət	(conjunction) hi ˈsɛd ðət i ˈsɔ ɪt
				(relative) ˈhiz ðə ˈmæn ðət ˈdɪd ɪt
the	ði	(rare) ˈe ˌmæn, nɑt ˈði ˌmæn	ðə	(+cons.) ðə ˈtri; ðə ˈrɑd; ðə ˈwɔl
			ðɪ	(+vowel) ðɪ ˈɜθ; ðɪ ˈɛnd

NOTE: ðɪ is also sometimes used before j by assimilation (§§94 ff.); as, ðɪ ˈjɪɚ; and before h followed by a front vowel; as, ðɪ ˈhit, ðɪ ˈhɪlz, ðɪ ˈhɛdʒ. What fact in the formation of h explains this?

there	ðæɚ	(adv.) ˈðæɚ ðe ˈɑɚ	ðɛɚ	(expletive) ðɛɚ wɚ ˈtwɛntɪ ˌðæɚ
			ðɚ	ðɚ ˈɑɚ ˌnʌn
them	ðɛm	ˈgɪv ɪt tə ˈðɛm, nɑt ˈʌs	ðəm, ðm̩	wi ˈmɛt ðəm ət ˈtu ə ˈklɑk (see §205)
to	tu	ˈhwɑt ɪz ɪt ˈkʌmɪŋ ˌtu?	tʊ	(+vowel) frəm ˈhɛvən tʊ ˈɜθ
			tə	(+cons.) ˈɪzɪ tə ˈdu; ˈgo tə ˈtaʊn

NOTE: Many cultivated speakers frequently use tə also before vowels; as ˌhi hæd ˈnʌθɪŋ tə ˈɔfə. In such cases the ə is very short.

up	ʌp	ˈmek jɚ ˈmaɪnd ˌʌp	əp	ˈmek əp jɚ ˈmaɪnd
upon	əˈpɑn	ˈhwɑt wəz ɪt ˈbest əˌpɑn?	əpən	(chiefly Brit.) ˈlaɪn əpən ˈlaɪn
us	ʌs	ˈgɪv ɪt tʊ ˈʌs, nɑt ˈðɛm	əs	ðe ˈæskt əs tə ˈdʒɔɪn ðəm
's			s	ˈlɛts nɑt ˈgo ˌjɛt

NOTE: In the phrase *let's see*, the word *us* was originally not present; *let see* was later transformed to *let's see* by analogy of *let's go*, etc.

was	wɑz	ˈðæɚ i ˈwɑz	wəz	ˌhi wəz ˈðæɚ; ˌhi wəz ˈnɑt ˈhɪɚ

Spelling	Stressed Form		Unstressed Form	
we	wi	ˈso du ˈwi	wɪ	ˌwil du ˈɔl wɪ ˈkæn
were	wɝ	ˈðæɚ ðe ˈwɝ	wɚ	ˌðe wɚ ˈðæɚ; ˌðe wɚ ˈnɑt ˈhɪɚ

NOTE: In England the stressed form **wɛə, wæə** is not uncommon. It is archaic or dialectal in America. **wɛɚ, wæɚ** is the historical stressed form, and **wɝ** is a restressed form (see next section).

what	hwɑt	hi ˈnoz ˈhwɑts ˈhwɑt	hwət	(in rapid speech) ˈsi hwət ˈaɪ ˌhæv
will	wɪl	aɪ bɪˈliv ðe ˈwɪl	wl̩	ˈno ˌwʌn wl̩ ɛvɚˈnotɪs ɪt
'll			əl	ˈfɑðɚ əl ˈbi ˌhɪɚ ˈsun
			l̩	ˈnɛd l̩ ˈbi ˌhɪɚ ˈsun; ˈhwɑt l̩ ju ˈdu?
			l	ˌðel ˈkʌm; ˌwil ˈθɪŋk əˌbaʊt ɪt
would	wʊd	aɪ ˈwɪʃ ðe ˈwʊd	wəd	ˈdʒʊn wəd ˈlaɪk tə ˈgo
'd			əd	ɪt əd bi ˈfʌn, ˈwʊdn̩t ɪt?
			d	ˌðed bi ˈrɛdɪ baɪ ˈfoɚ
you	ju	ˈðɪs ɪz fɚ ˈju	jʊ	pɚˌhæps juˈɔt tu
	ju	ˈjuɚ ðɪ ˈonlɪ ˈgɛst	jə	ˈhaʊ də jə ˈdu?
			jɪ	ˈhaʊ də jɪ ˈdu?

NOTE: The unstressed form **jɪ**, occasionally heard in very familiar speech, is probably the unstressed form of *ye* **ji**, now obsolete in speech in its stressed form.

your	juɚ	ɪz ˌðɪs ˈjuɚ hæt, ɚ ˈmaɪn?	jɚ	aɪ ˈθɪŋk aɪ ˈsɔ jɚ ˈbrʌðɚ təˌde

NOTE: Unstressed *your* **jɚ**, in addition to its usual personal possessive meaning, has acquired a special sense, not personal or possessive, but referring to something as familiar, often with a connotation of contempt; as, "That's a sample of your practical education!" So Hamlet says to Horatio,

> "Ther are more things in heauen and earth, Horatio,
> Then are drem't of in your (jɚ) philosophie."

138. Certain common verbs with full meaning (in contrast to auxiliaries) occur in familiar phrases, such as *come ˈin, go ˈout, go ˈdown, see ˈhere, said ˌhe*, which in actual speech are like

single words of two syllables with the first unaccented, and hence often with obscured vowel; as, **kəm ˈɪn, gu ˈaut, gə ˈdaun, sɪ ˈhɪɚ, səd ˌi.** In familiar speech the word *have*, ordinarily stressed when it means "possess" and unstressed when it is auxiliary, sometimes has its unstressed form with full meaning "possess"; as, **juv no əbdʒɛkʃən, hæv ju? hid no kɔz tə kəmplen; dʒɪm həz no taɪm tə du ɪt.** It is possible that this use is due to the analogy of the auxiliary use of *have* with *got* in the sense of "possess"; as, **hiz gɑt no taɪm tə du ɪt.**

139. In connection with these relation words, which are stressed in different degrees with corresponding gradation of vowels, we have to observe the phenomenon of **restressing.** It has been seen in the discussion of gradation, that several different vowel sounds all reduce to ə or ɪ when unstressed. Now since this, like most processes of language development, is unconscious, it sometimes happens, especially in popular speech, when a word like *from*, which is more often unstressed **frəm,** for some reason is stressed, that it does not return to its less familiar original stressed form **frɑm,** but takes the form **frʌm.** Hence some speakers, when they have occasion to stress *from* pronounce it **frʌm** instead of **frɑm.** Similar instances are seen in *what*, with unstressed form **hwət** and restressed form **hwʌt;** *was*, unstressed **wəz,** restressed **wʌz;** *for*, unstressed **fɚ,** restressed **fɝ;** *of*, unstressed **əv,** restressed **ʌv.**

In the foregoing examples the restressed form has not attained to good usage. But in the case of *were*, unstressed **wɚ,** the restressed form **wɝ** has become the standard form, while the historical form **wæɚ** has virtually disappeared in America, though it remains **wæə, wɛə** in England. Likewise with *does*, unstressed **dəz,** restressed **dʌz.** We should expect the form **duz** from **du,** and this perhaps remains in the dialect stressed form **duz** which is sometimes heard. See § 322.[30]

140. In some instances the consonant also has been affected by lack of stress. It has long been a tendency of voiceless con-

sonants in English to become voiced by loss of stress in unstressed syllables. Words like *as*, *was*, *is*, *his*, were formerly pronounced **ɑs, wɑs, ɪs, hɪs** with **s**, not **z**. The original **s** is still seen in *it's a fine day*, where the influence of the voiceless **t** has preserved the **s** from changing to **z** as it has in *it is* **ɪt ɪz**. But as these words are usually unstressed, they have become **əz, wəz, ɪz, (h)ɪz**. So now, even when they are occasionally stressed, the **z** of the usual unstressed form has been transferred unconsciously to the stressed forms, and the **s** has disappeared from the words. In the case of the word *of*, the older stressed form **ɒf, ɔf**, now spelt *off*, has remained in use as an adverb, and the unstressed form **əv**, spelt *of*, is used as a preposition. But when the preposition occasionally is stressed, it becomes **ɑv**, and is now regarded as a different word from **ɔf**. So **ɔf** is the originally stressed form, and **ɑv** a restressed form, of the same word.

141. In the words *of* **ɑv, əv**, and *with* **wɪð, wɪθ**, formerly pronounced **ɒf, wɪθ**, the voiced **v** and **ð** now heard are due to lack of stress. But *there*ˈ*of* and *there*ˈ*with* are still often pronounced **ðæəˈɑf, ðæəˈwɪθ**, because of the accent on the second syllable, which has preserved the **f** and **θ** voiceless. When these words are pronounced **ðæəˈɑv, ðæəˈwɪð**, the voiced **v** and **ð** are due to the analogy of **ɑv** and **wɪð**.

The word *with*, however, often preserves its older pronunciation **wɪθ**, especially before voiceless consonants, as in **wɪθˈstænd, wɪθˈhold, wɪθ tɑm, wɪθ kæəɪ, wɪθ pitə**; and some speakers regularly use **wɪθ** in all positions. It is a common form in the North of England and in Scottish standard English.

Spelling-Pronunciation

142. It has been emphasized that phonetic change is concerned primarily with the spoken language, and not with the written or printed representation of it. Most phonetic change is

unconscious, and some of it has begun with the illiterate and afterwards found its way into cultivated usage. As a rule the changes that have occurred have either never found their way permanently into the spelling—as seen in the word *use*, which has gained an initial **j** that has not appeared in the spelling; or if the spelling has been changed to express the new sound, as it was in the word *you* (formerly without *y* or **j** sound), this has always happened long after the new pronunciation has become firmly fixed in speech. Thus it was two or three hundred years after the final syllable ceased to be sounded on words like *sunne runne*, *houre*, *seeme*, *heare*, and hundreds of others, before the spelling was changed to *sun*, *run*, *hour*, *seem*, *hear*, to correspond with the sound; and in numerous cases the spelling has not even yet conformed to changes in sound made hundreds of years ago, as in such words as *have*, *love*, *make*, *cause*, *tell*, *said*, etc. Reflection on this aspect of the development of English shows how entirely without foundation is the reasoning frequently heard when a question is raised about the pronunciation of a word: "It is spelt so and so; therefore it should be pronounced so and so." E.g., it is argued that *clerk* and *sergeant* cannot properly be pronounced **klɑ(ɚ)k** and **sɑ(ɚ)dʒənt** because they are spelt with *er*. Yet *clerk* is regularly so pronounced in England, and *sergeant* so generally. Such reasoning puts the cart before the horse. The logical reasoning would be, since *clerk* and *sergeant* are pronounced **klɑ(ɚ)k** and **sɑ(ɚ)dʒənt**, they should be spelt with *a* instead of *e*.

It happens that the spelling of most words like *star*, *carve*, *smart*, *hart*, *far*, *farm*, has, in fact, conformed to the pronunciation. These words, like *clerk* and *sergeant*, formerly were all spelt with *er*, and continued to be so written long after the sound had changed from **ɛr** to **ɑɚ**. See §365.

143. (1) Those who reason that words should be pronounced as they are spelt scarcely realize what a revolution would be

wrought in present English if they carried out their rule to any extent. Transcribe the following words in a spelling-pronunciation; that is, with the pronunciation they would have if all the letters were sounded in what would seem to you their most usual way:

Among, slough, brought, anxious, said, nothing, worst, people, pretty, brief, fiend, friend, money, could, bargain, road, abroad, scarce, farce, mouse, rouse, famous, where, here, hear, heard, beard, treat, great, leak, break, steak, ever, fever, done, gone, tone, none, whose, those, whole, whale, poor, moor, door, floor, seven, even, early, nearly, pearly, pear, fear, goer, doer, swear, answer, swore, sword, word, ford, form, worm, though, thought, tough, bough, through, home, some, mere, there, pays, says, gown, grown, down, mown, eight, height, caught, laughed, draught, evil, devil, double, doubtless, beeches, breeches, been, cloven, oven, bother, other, honor, honest, host, heir, weir, shelf, self, half, Ralph, revived, lived, power, mower, finger, singer, longer, anger, hanger, sorehead, forehead, hew, sew, county, country, grove, above, move, prove, over, cover, mover, all, shall, believe, sieve, wholly, jolly, surmise, promise, dully, gully, fully, pullet, mullet, goes, toes, does, shoes, frowned, owned, cross, gross, toward, coward, hearing, bearing, pouch, touch.

(2) Find several English words whose pronunciation you can know for certain from their spelling.

144. (1) **The influence of spelling on standard pronunciation** has been especially important since the middle of the 18th c., and especially owing to the influence of Dr. Johnson, who, though he recognized both a colloquial and a formal style of pronunciation, stated this principle: "For pronunciation, the best general rule is to consider those as the most elegant speakers who deviate least from the written words." This statement was made in apparent disregard of the utter impossibility of carrying it out in the state of English spelling then and since. His influence was strengthened by the prevailing idea of the time

that the written form of the language was the language itself. This appears clearly in the dictionaries of John Walker (1791 and on), in which letters are treated as the elements of language, with "powers" of sound, as if they were a kind of seed from which the spoken language sprouted and grew, and therefore the original source to which all questions of correct pronunciation were to be referred back.

(2) This point of view is still current and influential. Its adherents cry in triumph, "Isn't there a *t* in *often?* Why should we neglect to pronounce it?" As Dr. Fuhrken has aptly expressed it, they are willing to mispronounce words in order to show that they know how they are spelt. In addition to being fundamentally in error about the nature, origin, and growth of all language, they strangely ignore the fact that they neither do nor can carry out their own rule, as the exercise above is sufficient to show.

(3) A spelling-pronunciation that departs from the traditional pronunciation (the one that is transmitted by word of mouth and learned by ear) is a blunder, of the same kind that it would be to pronounce *many* as **mæni** or **meni** instead of **mɛni.** But when such a blunder is adopted into general good use, as was **swun,** formerly by regular sound-law pronounced **sun** (cf. *sword* **soɔ·d**), or **ˌæsɪgˈneʃən** (cf. *sign* **saɪn**), and a large number of others, it is accepted and supersedes the correct traditional form. So a very considerable number of words—though a very small proportion of all—have conformed in some respect to the spelling which happened to be current when the change was made. Such changes are, however, apt to be isolated ones, leaving unchanged many other words spelt in the same way. Thus the pronunciation **kɑnstəbl̩,** a spelling-pronunciation for the traditional **kʌnstəbl̩,** or **kɑmræd** for traditional **kʌmræd,** have become isolated in pronunciation from the many other words in which ʌ is spelt with *o*, as *honey*, *love*, *above*, *some*,

come, etc. In two groups, however, (1) words like *host*, *human*, *hospital*, etc., which all came into English from OF without a **h** sound (see **h**, §203), and (2) words like *theater*, *author*, *apothecary*, etc., which came into English with *th* sounded **t**—spelling-pronunciation has changed nearly all the words to pronunciations with the **h** sound and the **θ** sound (see **t**, §157).

145. On comparing *host*, *human*, *hospital* with *hour*, *honest*, *honor*, and *theater*, *author*, *apothecary* with *Thomas*, *Thames*, *Esther*, an underlying principle of spelling-pronunciation is revealed. The **words that have resisted spelling-pronunciation** (*hour*, *Thomas*) **are more common words,** and therefore more likely to be thoroughly learned by children before they learn to read and write. On the other hand, if we first learn words from books, or if we see them in print oftener than we use them, we are more apt to guess at the pronunciation from the spelling. As a great many people are apt to do this, and many even cultivated and influential people unconsciously reason that words should be pronounced as they are spelt, many such spelling-pronunciations get into good use, and older traditional and phonetically natural pronunciations are gradually abandoned.

146. Spelling-pronunciation is especially apt to affect proper names—particularly names of places pronounced from the spelling by people who do not live in them and hence do not know the traditional pronunciation. So *Greenwich*, *Woolwich*, and *Norwich* in England are pronounced by the inhabitants of those towns **grɪnɪdʒ, wʊlɪdʒ, nɒrɪdʒ** (the latter riming with "cold pease porridge"). But people not personally familiar with the places themselves and seeing the names in print are likely to call them **grinwɪtʃ, wʊlwɪtʃ, nɔrwɪtʃ.** So *Cirencester* **sɪsɪtɚ** is apt to be called elsewhere **saɪrənsɛstɚ.** *Concord* **kɒŋkəd** and *Chelmsford* **tʃɛmzfəd** are usually called **kɑnkɔɚd** and **tʃɛlmzford** outside of New England. The student can easily find other examples of the same sort.

147. Evidence that the influence of spelling on pronunciation is increasing with the advance of popular education is seen in that in recent times in some of the places themselves the traditional pronunciation is giving way to the spelling-pronunciation. Thus the inhabitants of Cirencester and others in England are beginning to call the place **saɪrənsɛstə, -tɚ.** *Ravenna* (Ohio) is called by its old residents **rɪˈvænə,** but it is now commonly **rəˈvɛnə.** *Mantua* (Ohio) is locally **ˈmæntəˌwe,** but sometimes called **ˈmæntuə** or **ˈmæntʃuə** by those who depend on the spelling.[61]

The comparatively recent increase in the influence of spelling on pronunciation has resulted in the fact that certain places in England have the traditional name, often widely separated from the fixed spelling, while places in America with the same names have the more theoretical pronunciation according to the spelling. Thus we have **grɪnɪdʒ** in England, but **grinwɪtʃ** in Connecticut; the river **tɛmz** in England, but **θemz** in Connecticut, except as the English name is imitated; *Waltham* **wɒltəm** in England, but **wɒlθəm, wɔlθæm** in Massachusetts; *Edinburgh* **ɛdn̩bʌrə** in Scotland, and **ɛd(ɪ)nbɜ̰g,** various American towns; *Marlborough* **mɔlbərə,** England, and *Marlboro* **ˈmɑ(ɚ)lˌbɜ̰o,** Massachusetts.

148. In some cases, compounding of names brings together certain letters so as to suggest sounds not found originally in the name. Thus the name *Waltham* is composed of *Walt*+*ham* ('home,' 'dwelling'), in the same way as *Windham* **wɪndəm,**

[61] Regarding the correctness of the different pronunciations, it should be remembered that a different law governs in personal and place names from that of speech in general. In the latter, general usage of the cultivated determines correctness. But in personal and place names, it is personal and local usage that determines the pronunciation. For example, all the rest of the country cannot properly change the name of Concord, Massachusetts, to **ˈkɑnˌkɔɚd** so long as the local inhabitants regularly call it **ˈkɒŋkəd.** The same principle holds in family names. See Allen W. Read, *Amer. Speech,* Feb. 1933, pp. 42–46.

Durham **dʒəm**; so we should expect **wɔltəm**, as we find in England. But the spelling *th* has suggested the sound **θ**, which is used in the American name **wɔlθæm**. *Chatham*, however, remains **tʃætəm**, and is often **ˈtʃætˌhæm** in the Ohio town and on Cape Cod, being also a spelling-pronunciation, but with a different result. *Windham*, Vermont, is locally often **ˈwɪndˌhæm**. Similar to *Waltham* are *Eltham* in England **ɛltəm, ɛlθəm**, *Bentham* **bɛntəm, bɛnθəm**, *Walsham* **wɒlsəm, wɒlʃəm**, *Lewisham* **luɪsəm, luɪʃəm**, *Feversham* **fɛvəzəm, fɛvəʃəm**.

In personal names spelling-pronunciation is seen in *Leopold*, formerly **lɛpl̩d** (cf. *leopard*), now, from the spelling, **liəpold**; *Ralph*, formerly, and still in England **ref**, now **rælf**; *Theobald*, formerly **tɪbl̩d**, now **θiəbɔld**; *Walter*, formerly **wɔtɚ**, now **wɔltɚ**. Personal names, being applied to many individuals and families, often split up into several different forms. Thus the name *Theobald* is represented by the various forms of the older pronunciation **tɪbl̩d** in the names *Tibbits*, *Tibalt* (*Tybalt* in *Romeo & Juliet*), *Tibbals*, and the spelling-pronunciation **θiəbɔld**. *Walter* shows relics of its earlier pronunciation in the derivatives *Watt*, *Waters*, *Watson*, *Watkins*. See §§221 ff.

149. Sometimes the spelling of a name has conformed to the earlier traditional pronunciation. So in the name *Ker*, *Kerr* **kɑɚ**, changed in spelling to *Carr* to correspond to the sound; and vice versa, the pronunciation of other instances of the same name has conformed to the spelling *Kerr*, becoming **kɝ**. So with *Berkley* and *Barclay*. *Berkley* was formerly pronounced **bɑ(ɚ)klɪ**, as still in England, and accordingly sometimes spelt *Barkley*, *Barclay*, while in other cases the pronunciation conformed by spelling-pronunciation to the form *Berkley* and became **bɝklɪ**.

150. Of words other than names, spelling-pronunciation has changed some that have become less familiar than formerly. Often both pronunciations are used—the older traditional one, and the newer spelling-pronunciation. So it is, frequently, with

a class of words having the sound ʌ spelt with *o*, such as *love, dove, above, come, shove*, etc. (§325). The commoner words have retained the ʌ sound. But the word *wont* **wʌnt**, 'custom,' 'accustomed,' is now often pronounced **wont** from the spelling. Words which formerly had ʌ but now have **ɒ, ɑ** from the spelling are *dromedary* **ˈdrʌmə|dɛəɹ, ˈdrɑmə|dɛəɹ**, *comrade, constable, bomb, grovelling*. The old pronunciation with ʌ is still heard in these, and commonly in some of them.

A group of words like *fault, vault, falcon, altar*, borrowed from French, in which the spelling with *l* is due to imitation of their Latin originals, had no **l** sound when they became English, and for long afterwards. But most of them have now conformed to the spelling; *fault* was **fɔt** in the 18th century. This accounts for the pronunciation of *Walter* mentioned above, §148.

Miscellaneous examples of spelling-pronunciation are: *steelyards*, formerly **stɪljəːdz**, now sometimes **ˈstil|jɑəːdz**; *registrar* formerly **rɛdʒɪstrəː**, now **ˈrɛdʒɪs|trɑəː**; *nephew* **nɛvju**, now often **nɛfju**; *apothecary*, formerly **əˈpɑtɪ|kɛəɹ**, now **əˈpɑθə|kɛəɹ**; *author*, formerly **ɔtəː**, now **ɔθəː**; *soldier*, formerly **sodʒəː**, now **soldʒəː**; *Wandsworth*, formerly **wɒndzə**, now **wɒndzwəθ**; *Southwark* **sʌðək**, sometimes now **saʊθwək**.

Consonants in Detail

The Stops

p

151. (1) Repeat the organic description and give the descriptive name of **p**.

(2) Comment on the **p** sound and its spelling in *apple, appear; sheeppen, hop pole; hiccough, corps*.[62]

[62] In finding answers to these questions and others the student will often find the Index useful.

(3) What is the acoustic difference (including on-glides and off-glides) in the sounds of **p** in *pen, copy, rope?* in *stamp, stopped?*

152. (1) In the past history of English, speakers have tended unconsciously to insert a **p** between **m** and any of the sounds **t, k, f, θ, s, ʃ**; as in *empty*, formerly *emty; Tompkins*, formerly *Tomkins; glimpse*, formerly *glimse; presumption*, cf. *presume.* In some cases *p* has been adopted in the spelling, and sometimes the **p** still remains unspelt, though plainly heard; as in *Thompson* or *Thomson; Sampson* or *Samson*; in *comfort, something, warmth, dreamt*, and some others spelt without *p*, a **p** is often sounded. **kʌmpfə˞t, sʌmpθɪŋ, wɔə˞mpθ, drɛmpt.** This is a natural phonetic development. In forming **m** the lips are already in position to form either **p** or **b.** The next sound being oral, the velum rises to close the nasal passage; but if this is closed before the lips open, the stoppage of the breath forms a **p** if the next sound is voiceless.

(2) What will happen to the word *jumped* **dʒʌmpt** if the lips open from **m** as soon as the velum rises for **t**?

(3) What is the relative timing of the lip opening and the velum closure when *glimpse* is pronounced **glɪms**?

In British speech **p** is often omitted after **m,** whether spelt (*empty, prompt, tempt*) or not (*warmth, dreamt*).

For the aspiration of **p,** which is similar to that of **t,** cf. §§29, 53.

b

153. (1) Repeat the organic description and the descriptive name of **b.**

(2) State the relation of **b** to **p.**

(3) While the lips and the velum are closed for **b,** what becomes of the breath that vibrates the vocal cords?

(4) Comment on the **b** sound and its spelling in *rabbit, ebb; subbase, curb bit.*

(5) Point out the acoustic and organic differences in the **b** of *bee, Toby, rob.*

154. (1) In some words a **b** has developed between **m** and **l, r,** or **ɚ**; as in *thimble* **θɪmbl̩,** formerly **θɪml̩**; *nimble* **nɪmbl̩,** formerly **nɪm(ə)l**; *humble* **hʌmbl̩,** Lat. *humilem; bramble* **bræmbl̩,** formerly **bræːm(ɛ)l**; or in *slumber* **slʌmbɚ,** formerly **slʊm(ə)r**; *timber* **tɪmbɚ,** formerly **tɪmr.** Explain the excrescent **b** as **p** in *empty* was explained.

(2) In *dumb, climb, comb, jamb, lamb, plumb* the silent *b* was formerly **b** (**dʊmb, kliːmbən, kɔːmb,** etc.). But no **b** was ever sounded in *limb,* **lɪm,** *numb* **nʌm,** which are derived from OE *lim* **lɪm** and *numen* **nʊmɛn.** After the **b** had ceased to be sounded in *dumb* **dʌm,** *climb* **klaɪm,** *comb* **kom,** etc., the words *lim* and *num* also added a silent *b.* This kind of imitation in spelling is called **reverse** (or **inverse**) **spelling,** and the spelling *numb* shows that the *b* in *dumb* had become silent by the time it was added to *num.* Why does it show this?

Thus reverse spelling becomes valuable evidence about early pronunciation. For example, what does the spelling *garding* for *garden* **gɑɚdɪn,** found in an old letter, show about the writer's pronunciation of *running, coming,* etc.?

t

155. (1) Repeat the organic description and the descriptive name of **t.**

(2) Observe the effect of sounding **t** with the tongue point placed on the very front edge of the teethridge. Try it also on the backs of the upper front teeth. These observations will be useful in pronouncing German and French **t.**

(3) Comment on the **t** sound and its spelling in *tool, seat; attend, outtalk; Thomas, Tom, Anthony, Tony; indict, victuals, mortgage; eighth, ninth.*

156. In words in *-tion* (*nation*), *-tial* (*partial*), *-tient* (*patient*),

-tious (*cautious*), derived from Latin, either directly or through Old French, the **t** sound was not used in French or in English. The Latin **t** in *-tion*, etc., had become, first **ts** (an affricate, cf. §41) and then **s**. The spelling was usually *-cion*, *sion*, etc., in Old French and Middle English. The spelling *-tion*, etc., was later substituted in imitation of Latin spelling (especially at the revival of learning in the 16th c., when scholarly reverence for Latin and Greek greatly increased), but without affecting the sound **s**. This **s** sound in Early Modern further changed to **ʃ**, by the influence of the following **ɪ** (later **j**); see §195 (3).

157. The spelling *th* represents the **t** sound in a few English words, as *Thomas*, *Thompson*, *Anthony* **æntənɪ** (cf. *Tony*), *thyme* **taɪm**, *Esther* **ɛstɚ**. These are spelt in imitation of Latin, in which there was no **θ** or **ð** sound and *th* was pronounced **t** (Latin borrowed the spelling from Greek, where there had once been a **h** sound after the **t**). Observe that in the derived Romance languages (French, Spanish, Italian, etc.) there is also no **θ** or **ð** sound descended from Latin. Cf. §183 (3).

In many cases, however, the **t** sound spelt thus with *th* was in English later changed to a **θ** sound through the influence of the spelling (cf. *Spelling-pronunciation*, §§142–150), so that many words with *th* now pronounced **θ** were formerly in English pronounced with **t**.

(1) What is suggested about earlier pronunciation by the nicknames *Kate*, *Betty*, *Marty*, *Ted*, *Art*, *Bart*, *Matt*, *Nat*, *Tad*, *Berty* (girl's name), *Dot*, *Dorrit?*

158. (1) What is the natural tendency of the **t** sound in *postmaster*, *must be*, *you must do it*, *next month*, *next door*, *last night*, *half past five*, *sit down*, *I don't know*, *perfectly*, *exactly*, *facts?*

(2) Would you consider it correct to pronounce **t** in the foregoing expressions? Would you consider it correct to pronounce **t** in *chasten*, *christen*, *fasten*, *glisten*, *hasten*, *listen*, *moisten?* in

bristle, castle, hustle, thistle, trestle, whistle, wrestle? in *chestnut, mustn't?* in *soften?* Would you recommend **t** in *often?*

159. Some words ending in *-st* formerly ended in *-s* only; e.g., *against*, formerly *agains; amongst*, formerly *amongs; midst*, formerly *mids*. Compare also the dialectal pronunciation **wʌnst** for *once*, **twaɪst** for *twice*, **əkrɔst** for *across*. The **t** was added to *once* **wʌnst** for the same phonetic cause as to *against*. Why is one incorrect and the other correct?

A similar addition of **t** is found in some cases after final **n**. It has become accepted English in *peasant*, from Old French *paysan; pheasant*, OF *faisan; pennant*, OF *pennon* (which is also in use). Forms not now in accepted use, but once in good standing are: *margent* for *margin* (regular in Shakespeare); *varmint* for *vermin; orphant* for *orphan* (cf. Riley's "Little Orphant Annie"). What is there in the tongue positions for articulating **s** and **n** that easily leads to the unconscious addition of **t** in such cases?

160. A **t** has also developed very generally in America between **n** and **s, ʃ, θ,** as in *sense* **sɛnts,** *fence* **fɛnts,** *answer* **æntsɚ,** *mention* **mɛntʃən,** *ninth* **naɪntθ.** Can you detect any difference in sound between *sense* and *cents*, *tense* and *tents*, *presence* and *presents?* Explain the organic reason for the addition of a **t** sound in *sense* **sɛnts,** etc. See §152.

161. The words *debt, doubt, receipt* have never sounded the *b* or *p* in English. These words were taken into English in their spoken forms from Old French in the 13th and 14th cc. At that time the written forms were usually *dette, doute, receite*, in agreement with their pronunciation. But scholars frequently inserted the letter *b* in the spelling of *debt* and *doubt*, and *p* in *receipt*, as if the English words had been taken directly from the Latin forms *debitum, dubitare, recepta*. In Latin the *b* and *p* had been sounded, but had become silent in the French descendants of

the words long before they were adopted by speakers of English. The artificial Latinized spelling has not resulted in restoring the lost sounds in these words; compare *receipt* with *conceit, deceit.* In the word *bankrupt* the letter *p* was first wrongly added and then later pronounced. Look up its etymology. How does this exemplify the third paragraph of §144?

162. In the phrase *at all* when it means "in any respect," "to any extent," the **t** is normally carried over to the following word and sounded exactly as it is in *a tall man* **ə ˈtɔl ˈmæn.** This phrase differs in pronunciation and meaning from the phrase *at all* as in *There are signs at some crossings but not at all* (**nɑt ət ˈɔl**). Compare *I saw no signs at all* (**ə ˈtɔl**).[63] In England the phrase *at home* is treated likewise, being often pronounced **əˈtoum.** The phrase *at all events* is also there pronounced **əˈtɔl ɪˌvɛnts.** The last two pronunciations are not usual in America. *At home* possibly exemplifies a difference between British and American **h.** In America the aspiration of **t,** even when strong, is quite distinct from the speech sound **h.** For the aspiration of **t,** cf. §§29, 53.

163. In American English **t** is often voiced between voiced sounds, as in *better* **bɛt̬ɚ,** *battle* **bæt̬l̩.** Yet voiced **t** is not the same as **d,** and does not belong to the **d** phoneme, since Americans do not confuse such words as *latter* **læt̬ɚ**—*ladder* **lædɚ,** or *putting* **pʊt̬ɪŋ**—*pudding* **pʊdɪŋ.** It never occurs at the beginning or end of a phrase, nor at the beginning of an accented syllable. For example, it may be voiced in the word *at* in **nɑt ət̬ ˈɔl,** but not in **nɑt ə ˈtɔl.** For further material on voiced **t,** see §379.

d

164. (1) Repeat the organic description and the descriptive name of **d.**

[63] Teachers or parents who correct children for saying **aɪ dɪdn̩t go əˈtɔl** are forbidding them to use a standard pronunciation, current both in England and in America among the cultivated classes. Cf. §250 (4).

(2) Try for **d** the positions of the tongue suggested for **t** in §155 (2).

(3) Apply to **d** the question asked in §153 (3).

(4) Comment on the sound and spelling of **d** in *ready, ladder, add, headdress.*

(5) Point out the difference in the sound of **d** in *day, lady, sad.*

(6) Is there a difference of meaning expressed by a difference of pronunciation in *a good deal?* In *used,* in *The cane was used to walk with* and *He used to walk with a cane?*

(7) What pronunciations do you know of *second, seconds?*

165. (1) What is the tendency of the **d** sound in *hands, pounds, friendship, landscape, handful?*

(2) Compare the tendency to drop **d** in the following, observing in which cases the omission of **d** would sound slipshod, and in which it would be apt to pass unnoticed in ordinary speech: *grandfather, grand time, grand old man, old year, old wall, old rat, old horse, windmill, wild grapes, wild animal, sound sense, good sense, sound idea, sound lumber, groundhog, wild west, sand ridge.*

(3) Considering the nature of the sounds before and after **d** in the foregoing, formulate and write rules showing when the **d** is most likely to be dropped in ordinary speech.

(4) Discover and write the phonetic law for the sound of the ending *-ed* of the following "regular," or weak, verbs: *dropped, talked, puffed, frothed, hissed, wished, watched; stated, needed; robbed, dragged, lived, smoothed, raised, rouged, dodged, shamed, sinned, clanged, filled; freed, stayed, pawed, showed, wooed, purred; carried, subpoenaed; appeared, spared, barred, warred, poured, moored, sighed, plowed, enjoyed, viewed; rattled, pardoned.*

(5) Try to find weak verbs whose present tense ends in other sounds than those found in the foregoing list. What accented vowels are notably absent from the ends of words?

166. In some words a **d** has developed after **n**; as in *thunder*, formerly *thunor; sound*, from *soun; astound*, from *astoune* (cf. *astonish*); *hind*, from *hine*. Note also the dialectal *gownd* for *gown*, *drownd* for *drown*, *drownded* for *drowned*. Cf. *Hendry* and *Henderson* from *Henry*. (1) Account for the **d** in *thunder* by reference to §152. (2) The **d** was added in *gownd* from the same phonetic cause as in *sound*. Why is *sound* correct and *gownd* incorrect?

k

167. (1) Repeat the organic description and the descriptive name of **k**.

(2) What is the difference in the position of the tongue contact for **k** in *keep* and in *coop?*

(3) Comment on the spelling and sound of **k** in *keel*, *character*, *quick*, *accord*, *bookcase*, *acquire*, *liquor*, *six*, *accent*, *luxury*, *strength*.

168. The verb *ache* **ek** used to be spelt *ake*, and the noun *ache* was spelt as now but pronounced **etʃ**, the spelling agreeing with the pronunciation. Note the following in Shakespeare's *Tempest:*

(1) I can goe no further, Sir,
My old bones akes. —III.iii.1.

(2) Fill all thy bones with Aches, make thee rore. —I.ii.370.

Observe that in the second passage the rhythm requires the pronunciation **etʃɪz**. Compare the pair *ake*, verb—*ache*, noun, with the following pairs of verbs and nouns: *bake—batch; break—breach; drink—drench; speak—speech; stick—stitch; stink—stench; wake—watch*. State just what changes have been made since Early Modern in verb and noun *ache*. (Dr. Johnson was partly responsible for the mix-up by falsely deriving the word from Greek *achos*, with which it has no connection. The result is an example of his great influence in the latter 18th c. See §144 (1).)

169. What is the sound of *x* in *tax*, *exact*, *luxury*, *luxurious* (two pronunciations), *anxious*, *anxiety?*

170. A Latinized spelling has become established in *indict* (Early Modern *indite*), *victuals* (EM *vittails*), *verdict* (EM *verdit*), *perfect* (EM *perfit*, Milton, *Lycidas*, *perfet*). On Latinized spellings, see §156. What effect has the mistaken spelling had on each word? See also §144 (3).

171. For *asked* the pronunciation is often **æst.** Give a reason for the loss of the **k** sound. Cf. §57. The present tense *ask* is also sometimes pronounced **æst.** How would you account for it in such a frequently occurring phrase as *ask the man*, or *ask the teacher?* Consider the preceding and following sounds, and apply the laws of place assimilation.

172. Initially before **n**, **k** was pronounced in *knee*, *knit*, *knot*, *knight*, *knife*, *knead*, *knowledge*, etc., till the 17th c. The **k** sound is preserved in *acknowledge* (from *a-knowledge*).

For the aspiration of **k** before vowels, which is similar to that of **t** and occurs under the same conditions, cf. §§29, 53.

g

173. (1) Repeat the organic description and the descriptive name of **g.**

(2) What is the difference in the position of the tongue contact for **g** in *geese* and *goose?*

(3) Apply to **g** the question asked in §153 (3).

(4) Comment on the spelling and sound of **g** in *guest*, *ghost*, *agree*, *aggressive*, *egg-glass*, *exist*, *luxurious.*

(5) Look up the pronunciation of *suggest*, and cf. Webster (1934), *Pron.* §143. For the pronunciation **dlæs** for *glass*, see **tlæs** in §95.

174. (1) Initial **g** before **n**, as in *gnat*, *gnaw*, *gnash*, *gnarled*, was pronounced till the 17th c.

(2) In *sing*, *hang*, *going*, *coming*, and other words with final

-ng, the *ng* was pronounced **ŋg**, with both **ŋ** and **g**, till Early Modern, as it still is when not final as in **fɪŋ-gɚ**, **æŋ-gɚ**, **hʌŋ-grɪ**, **lɔŋ-gɚ**, **strɔŋ-gɪst**. When final **g** was lost from the combination **ŋg**, this left **ŋ** alone, as in **sɪŋ**, **kʌmɪŋ**, though the spelling *ng* continued to be used. Note that this was actually dropping a **g** sound, not what was later falsely called "dropping the *g*." For further results, and the subsequent change of **-ŋ** to **n**, see under **ŋ**, below §§217 f.

The Fricatives

f

175. (1) Repeat the organic description and the descriptive name of **f**.

(2) Comment on the spelling and sound of **f** in *defend*, *affect*, *half-fed*, *off*, *rough*. Look up *diphtheria* in Webster, *Pron.* §277.

(3) Some languages have a bilabial **f** (IPA symbol **ɸ**), the "candle-blowing" sound.

(4) When **p** is followed by **f**, as in *stop for it*, *cupful*, the **p** is often assimilated to the lip-teeth **f** and so becomes a labiodental stop. A labiodental **m** likewise can be made, and may be heard in *comfort* **kʌmfɚt**, *symphony* **sɪmfənɪ**. Both are often heard together in *camphor* **kæmpfɚ**, *campfire* **kæmpfaɪɚ**.

176. The **f** sound in *rough* was an Early Modern substitute for an older voiceless tongue-back velar fricative spelt *gh* in Middle English. Its sound may be approximated by first sounding **k** and then, with the tongue back slightly loosened from the velum, forcing the breath through. There were two varieties, one farther forward like the **k** in *keep*, and one farther back like the **k** in *coop*. The IPA symbol for the fronter sound (occurring next to front vowels) is **ç**, and that for the backer (next to back vowels) is **x**. These are the sounds heard in German *ich* **ɪç**, *ach* **ɑx**. Most words now spelt with medial or final *gh* once had one of these two sounds. E.g., the ME pronunciation of *high*, *light*, *rough*,

taught was **hiːç, lɪçt, ruːx, tauxtə,** spelt as now. The fronter **ç** disappeared in Early Modern, and words like *high* **hiːç, lɪçt** became **haɪ, laɪt.** (The ME pronunciation is preserved in modern Scottish dialect **hiç, lɪçt.**) The backer sound **x** either (1) disappeared like the fronter, so that **tauxtə** became **tɔt,** and so with *bought* **bɔt,** *daughter* **dɔtɚ,** *aught* **ɔt,** etc.; or (2) another voiceless fricative, **f,** was substituted for **x,** and **ruːx** became **rʌf;** and so with *laugh* **læf,** *draught* **dræft,** *enough* **ɪˈnʌf, əˈnʌf,** *tough* **tʌf,** *cough* **kɔf,** *trough* **trɔf,** etc. Some words wavered between pronunciations (1) and (2); the obsolete **drɔt** for *draught* is no longer standard. Dialect pronunciations preserve the old alternate forms in *daughter* **daftɚ,** *through* **θruf,** and some others. *Dwarf* (ME *dwergh*) and often *draught* are now spelt with *f* (*draft*).

177. Similar substitutions for fricative sounds that were unfamiliar to Modern English speakers are seen in *Floyd* and *Fluellen,* in which **f** is substituted for the Welsh voiceless fricative **l̥** in *Lloyd, Llewellyn;* in **buθtl̥,** formerly heard for *Buchtel* (German **buxtəl**) *College,* Akron, Ohio, in which the dental fricative **θ** is substituted for the velar fricative **x;** and likewise in the pronunciation **trɔθ** for *trough* **trɔf,** widespread in America and not confined to local dialect. Such substitutions exemplify the important phonetic principle that a sound unfamiliar to a speaker or hearer will be spoken or heard by him as one of the nearest familiar sounds. This accounts for the fact that people often "hear" different sounds from those actually spoken.

178. In *delight* and *haughty, gh* is a reverse spelling (§154 (2)) and was never sounded. Chaucer's form of *delight* was *delit* **deˈliːt** and Milton's form of *haughty* was *hautie* **hɑːtɪ,** now **hɔtɪ.** Look up the origin of the word *sleigh* (cf. Webster, *Pron.* §144).

v

179. (1) Repeat the organic description and the descriptive name of **v.**

(2) State the relation of **v** to **f.**

(3) Comment on the spelling and sound of **v** in *navy, navvy, flivver, slave-vessel, leave vacant, of, Stephen.* As there is a bilabial **f** (IPA ɸ), so there is a bilabial **v** (IPA β). This sounds to English ears much like **w.**

(4) A foreigner in the author's boyhood (probably South German) was accused by his Yankee neighbors of calling a *grapevine "grape wine."* How does this exemplify the principle stated in §177?

(5) As **p** or **m** followed by **f** often becomes labiodental, so **b** or **m** followed by **v** is often formed with lip and teeth instead of both lips, as in *subvert, obvious,* or in *triumvirate* **traɪˈʌmvɚɪt.** Labiodental **p, b,** and **m** are not distinctive sounds in English, and so need not be represented in phonetic symbols.

180. (1) What is your pronunciation of *nephew?* See Webster, *Pron.* §208.

(2) Is there a difference of meaning expressed by a different pronunciation in the word *have* in (1) *That's ˈall I ˈhave to ˈgo ˌon,* and (2) *That's ˈall; I ˈhave to go ˈon?* Cf. §164 (6).

181. Transcribe the following groups: *life, lives, live; wife, wives, wive; strife, strive; thief, thieves, thieve; belief, believe; shelf, shelves, shelve; self, selves.* The change of **f** to **v** in these words took place at a time before the *e* of *lives, live,* etc., became silent, so that **f** was between vowels; and the *e* of *wife, life,* etc., was never sounded, and formerly not written. In view of these facts, under what circumstances did the **f** of these words become voiced to **v?** Cf. §96 and give the right name to the change.

182. (1) The **v** of unstressed *of* **əv** was formerly dropped before consonants (in speech and sometimes in spelling), as the **n** of *an* still is. Cf. Shakespeare, *Merch. of Ven.* III.i.101: "No sighes but a my breathing, no teares but a my shedding," in which *a*=**ə** for *of.* But in present standard speech the **v** has been restored except in the most familiar style. Cf. *of* in §137.

(2) Forms like *e'er* **ɛɚ**, *o'er* **oɚ**, *e'en* **iːn** for *ever*, *over*, *even* were not originally merely poetic contractions, but were natural pronunciations, once general in colloquial speech, now common in local dialect, and preserved in poetry. The forms heard in American dialect, "*nary*," "*ary*," as in "*nary man*," "*ary man*," are *ne'er a man*, "never a man," and *e'er a man*, "ever a man."

θ

183. (1) Repeat the organic description and the descriptive name of **θ**.

(2) Though spelt with two letters, the sound **θ** is a single sound, as much so as **s** or **f**, made with a single position of the tongue on the teeth. This position varies somewhat with different speakers. The tip and blade of the tongue may be lightly against the backs of the upper front teeth, usually near their points, or it may be protruded slightly between the upper and lower teeth.

(3) The reason for spelling this single sound with two letters, each of which by itself spells a sound quite different from **θ**, is found in the fact that the spelling *th* came to English through Latin from Greek, where it had at first spelt the sound of a dental **t** followed by a strong aspiration (§§29, 53) that was expressed by an *h* after the *t*. This strongly aspirated dental **t** became in later Greek the simple tongue-blade-teeth fricative and was then spelt *θ*, now used as the IPA symbol for the voiceless sound.

184. The word *drought* is pronounced **draut**, and the word *drouth* is pronounced **drauθ**. The attempt to schoolmaster the word *drouth* **drauθ** out of use by representing it as a mispronunciation of the other word *drought* has not succeeded in driving it out of good American usage. The two words are normal phonetic variants of the same OE word and have lived side by side, though in England *drought* **draut** is preferred in

the South, while *drouth* **drauθ** is common in the North and Scotland, and probably prevails in America as a whole.

A somewhat similar situation is seen in *height* and *highth*. The pronunciation **haɪθ**, and in America **haɪtθ**, is less common, but not absent from cultivated use. *Highth* was Milton's form. The form **haɪtθ** for **haɪθ** may be due to the crossing of **haɪt** and **haɪθ**, assisted probably by the analogy of **wɪdθ, brɛdθ, lɛŋkθ, dɛpθ**. A similar analogy has produced the **θ** sound on the ordinals **fɪfθ, sɪksθ, ɪlɛvən(t)θ, twɛlfθ**, which were formerly **fɪft, sɪkst**, etc., later changed in imitation of **foəθ, sɛvənθ, etθ**, etc. In the Bible of 1611, Joab smote Abner "vnder the fift ribbe," but Deuteronomy is "the fifth booke of Moses."

ð

185. (1) Repeat the organic description and the descriptive name of **ð**.

(2) Observe the pronunciation of *th* between vowels in the following foreign loan-words: *ether, method, catholic, atheist, sympathy, author, pathetic*, and compare it with the same in these native words: *either, brother, father, mother, fathom, feather, weather*. What difference appears?

(3) In words like *bath, oath, mouth* the singular forms in Middle English were pronounced **bɑθ, ɔːθ, muːθ**, and the plural forms **bɑːðəz, ɔːðəz, muːðəz**.

(4) Note likewise that the present-day words **nɔəθ, sauθ, hiθ, wɝθ**, show a similar correspondence to **nɔəðən, sʌðən, hiðən, wɝðɪ**; and

(5) That the nouns **brɛθ, bæθ, ʃiθ**, correspond thus to the verbs **brið, beð, ʃið**, which in ME were **brɛːðən, bɑːðən, ʃɛːðən**. By what native English phonetic law does **ð** replace **θ** in groups (2), (3), (4), (5)?

(6) In these changes there was much interference of analogy with phonetic tendency. No single rule without exceptions can

be given for the pronunciation of *th* in the plural of nouns ending in the sound θ in the singular. (a) When a consonant precedes *th*, the plural has θ: **hɛl(t)θs, fɪfθs, sɪksθs, etθs, naɪn(t)θs** (etc.), **mʌn(t)θs, brɛdθs, lɛŋkθs,** etc. (b) When ɚ (formerly a consonant r) precedes: **foɚθs, hɑɚθs,** etc. (c) When ɝ (formerly a vowel+a consonant r) precedes: **bɝθs, wɝθs, ɝθs,** etc. (d) Of the remaining words the following have **-θs: brɛθs, dɛθs, draʊθs, groθs, feθs, frɔθs,** and usually rare plurals and loan-words (**pɪθs, mɪθs**). (e) The following have **-ðz: bæðz, pæðz, maʊðz, oðz.** (f) The following waver: **riθs, -ðz, ʃiθs, -ðz, læθs, -ðz, brɔθs, -ðz, mɔθs, -ðz, troθs, trɔθs, -ðz, juθs, -ðz, truθs, -ðz** (order of preference not indicated). In all cases where the singular has **-ð,** the plural, of course, ends in **-ðz,** as **buθ, buð,** pl. **buðz.**

(7) What four pronunciations of the plural of *cloth* correspond to three different meanings?

186. The voiced sound ð is found in all the pronominal words *than, that, the, thee, their, them, then, thence, there, these, they, thine, this, thither, those, thou, though, thy,* where a former θ has been voiced by lack of stress in the sentence (cf. §§140, 141). The word *thither* is often heard pronounced **θɪðɚ.** The word is not in actual current use, and **θɪðɚ** is probably a spelling-pronunciation as regards the initial sound. It may be noted that the spelling-pronunciation of *th* is regularly θ, not ð (*Waltham, Gotham, Thames* (§147), *Thame*). The preservation of ð in the middle of the word may be due to the analogy of familiar forms like *weather, whether, rather, further, father,* etc.

187. For a long time in OE and ME the sound θ (*thick*) and its voiced correlative ð (*that*) were expressed by the symbols *þ* (called "thorn" from the ancient runic alphabet) and *ð*. But *þ* was not confined to spelling the voiceless sound and *ð* to the voiced, both being used for either. The sounds did not then distinguish from one another words otherwise alike, as they now do in *thigh* **θaɪ** and *thy* **ðaɪ.** They were thus like the other

fricatives in OE, **s, z** and **f, v.** Though both voiceless and voiced existed, they were not distinctive. Hence the letters *s* and *f* were used to spell both **s, z,** and **f, v.**

In late ME *th* came into general use to spell the sounds, and are still used to spell both **θ** and **ð** sounds. In the IPA alphabet **θ** (Greek) represents the voiceless, and **ð** (OE) the voiced sound.

The other OE letter *þ* in late ME and Early Modern came to resemble in manuscripts the letter *y*, and later the printed *y* often represented it, especially in abbreviations for *that* (*y*^{t}) and in *the* (*y*^{e}). The modern fad of using *ye* in shop signs to give an air of antiquity to things not ancient matches the ignorance displayed in pronouncing it **ji.**

s

188. (1) Repeat the organic description and the descriptive name of **s.**

(2) Comment on the spelling and the sound of **s** in *sent, cent, scent, schism, assail, hiss, except, practice.*

(3) Ascertain in which of the words *isle, island, aisle* the *s* was once pronounced, and in which it is a reverse spelling.

(4) Account for the sound of *s* in *it's good, Jack's got home, what's wrong, what's been done, quick's a flash, used to do it.*

189. Speakers differ somewhat in their tongue position for **s, z.** In the author's speech the two sides of the tongue are pressed against the upper teeth as far forward as the eyeteeth. The front edges of the blade on each side of the point touch the gums, and the point is flattened back upon itself so as to leave a small ditch, forming with the central ditch of the teethridge an aperture smaller than a pencil. Through this aperture a thread of air is forced out and makes a hissing sound across the edges of the teeth.[64] Some speakers make **s** with the tongue

[64] Apparently the sound is chiefly made by the lower teeth. If the jaw is lowered with the tongue point still in proper position, the hiss disappears. It can be restored without raising the jaw by substituting a card with upper edge cut in shape of the lower teeth.

against the backs of the lower teeth. With the aid of a mirror study your own tongue position in making **s**.

z

190. (1) Repeat the organic description and the descriptive name of **z**.

(2) State the relation of **z** to **s**.

(3) Comment on the spelling and the sound of **z** in *desire, dessert, scissors, discern, lazy, dizzy, his zeal, sacrifice, sons, son's, sons', Xerxes, anxiety, exhibit, Mrs., newspaper.*

(4) Compare *house* and *husband, goose* and *gosling,* and comment.

191. (1) Compare the following pairs: **jus, juz; əbɪus, əbɪuz; klos, kloz; lus, luz; bræs, brez; glæs, glez; haʊs, haʊz; ˈrɛfjus, rɪˈfɪuz; gris, griz.** In Middle English, **s** in these words was final in nouns and adjectives; in verbs it was followed by a vowel. How does this account for the **z**?

(2) How do you pronounce *to grease* and *greasy?*[65]

(3) Transcribe the following groups, with primary and secondary accents marked: (1) *exercise, execute, exhibition, exhortation;* (2) *exert, executive, exhibit, exhort.* State what you discover about the influence of accent on the sound of *x*. Compare also *luxury, anxious* with *luxurious, anxiety.*

192. (1) Arrange the following regular nouns in three groups according to the sound of the plural ending. Then discover what phonetic condition determines each of their endings. (The sounds **s, z, ʃ, ʒ, tʃ, dʒ** are called "sibilants.") *Glass, rib, tree, sofa, robe, ship, beam, fox, month, sky, city, rose, cliff, bed, shoe, bush, cow, hat, stone, duke, garage, saw, file, church, plume, fate, edge, book, boy, fan, bed, day, piece, rope, spade, hero, dog, king, pew, stove, fire, lathe, hill.*

How can one of the three groups be subdivided? See if you can fit the nouns *leaf, life, wife, mouth, house* into the grouping.

[65] See George Hempl, "Grease and Greasy," *Dialect Notes,* I, ix, 438 ff.

(2) The nouns of this sort ended in ME in **-ɪz** or **-əz.** In which groups has the vowel of the ending been lost? In which group has the consonant of the ending also been changed, and why?

(3) See if the same grouping can be applied to the sound of *s* on nouns in the possessive case. To the ending of verbs in the third person singular present tense.

ʃ

193. (1) Repeat the organic description and the descriptive name of **ʃ.**

(2) Comment on the spelling and the sound of **ʃ** in *bishop, sure, champagne, machine, mission, nation, ocean, conscience, nauseous, issue, anxious, luxury, dish-shaped.*

194. In the author's speech **ʃ** is formed with the tongue drawn slightly back from the position for **s,** so that the point and blade are more blunted than for **s.** The sides of the tongue touch the upper teeth only as far forward as the front bicuspids, leaving a considerably wider and deeper passage over the blade of the tongue than for **s.** The front of the tongue is at the same time raised higher toward the hard palate (see Fig. 6, p. 42).

195. (1) English **ʃ** has three principal sources historically. It first developed out of the OE combination **sc** in which **c** was at first a tongue-front palatal stop (IPA symbol **c**), no longer found in present English.[66] The combination **sc** gradually developed into the simple sound **ʃ** by loosening the stop contact and bringing the tongue front into the position for **j.** A comparison of Figures 5 and 6 (p. 42) will show the position for **j** and **ʃ** close to each other. Then the **s** was changed by the **j** position into **ʃ,** much as the words *miss you* **mɪs ju** now tend to

[66] This sound can be made approximately by holding the point of the tongue behind the lower teeth and trying to pronounce **t.**

become **mɪʃu** by assimilation. For a similar later change, see (3) below.

(2) A second source of **ʃ** is an Old French **tʃ** sound (spelt *ch*), which in later French lost its first (stop) element **t**, leaving the fricative part as a separate speech sound, as in Modern French words spelt *ch* (*charmant*, etc.). Some of these words were taken into Early Modern English with the **ʃ** sound, as in *chandelier* **ʃændəlɪɚ**, *Charlotte* **ʃɑɚlət.** See also below, §§198 (1), 208 (2).

(3) The third source of **ʃ** is found in an Early Modern native sound change in words like *mission*. The sound of **ʃ** in these was originally **s**. To learn how it changed to **ʃ** we must first observe two phonetic tendencies.

(**a**) Observe what happens to the unaccented **ɪ** sound in the word *Indian*, first pronounced in three syllables, ˈ*In-di-an*, and then in two, ˈ*Ind-ian*. Show the difference by phonetic transcription. This same change took place in many words like *mission* about the time of Shakespeare. Thus *mission*, which had been pronounced in three syllables **ˈmɪs-ɪ-ən** came to be pronounced in two as **ˈmɪs-jən** with the same change of unaccented **ɪ** to **j** as in *Indian*.[67]

(**b**) The second phonetic tendency is seen at present in such a phrase as *miss you* or *this year*. In ordinary speech these are not **mɪs ju** and **ðɪs jɪɚ**, but **mɪʃu, ðɪʃɪɚ**. Now compare Figures 5 and 6 (p. 42) and observe the similarity of tongue position for **j** and **ʃ**. What light does this throw on the effect of the palatal sound **j** by place assimilation on a preceding **s**? So the change from **ˈmɪs-ɪ-ən** to **ˈmɪs-jən** continued further to **ˈmɪʃən.** The same change affected all words having the unaccented sounds

[67] This change spread gradually, so that for a long time both pronunciations are found side by side. Thus in *Mids. Night's Dream*, l. 23, *Hermia* is **ˈhɛr-mɪ-ə** and in l. 46 it is **ˈhɛrm-jə.**

-sɪə(n), as *confession, discussion, impression, passion, session,* and many more.

(4) The change was exactly the same in words like *nation,* in which the *-tion* is merely a disguising spelling for the same sounds **-sɪən** (see §156). The same combination of sounds with other spelling is seen also in *ocean* **oʊsɪən—oʊsjən—oʃən,** *special* **spɛsɪəl—spɛsjəl—spɛʃəl,** *conscience, nauseous, complexion* **kəmplɛksɪən—-plɛksjən—-plɛkʃən.**

(5) The same change is also disguised by spelling in words like *issue,* in which the unaccented **ɪ** is present before **u,** but not spelt. The Early Modern sounds were **ˈɪsɪu,** the modern "long *u*" (as in *mute*) being **ɪu** in Early Modern. Here **sɪ** developed in the usual way to **sj** and **ʃ,** so that **ˈɪsɪu** became **ˈɪsju** and then **ˈɪʃu.** So with *sensual* **sɛnsɪuəl—sɛnsjʊəl—sɛnʃʊəl; *luxury*** **lʊksɪurɪ—lʊksjʊrɪ—lʌkʃərɪ; *censure, fissure, pressure, tonsure,*** etc.

196. English **ʃ** is a single sound, like **s** or **f,** made with a single position of the speech organs, though commonly spelt with the digraph *sh.* This spelling comes from ME in which *ss, sch, ssh,* and *sh* were used to spell **ʃ.** *Sh* now spells no other sound (except in separate syllables, as in *Gates-head*).

ʒ

197. (1) Repeat the organic description and the descriptive name of **ʒ.**

(2) Comment on the sound and its spelling in *division, glazier, measure, usual, azure, luxurious, garage.*

(3) In what positions in the word (initial, medial, or final) may **ʒ** occur? Why is it not found doubled?

(4) State the relation of **ʒ** to **ʃ.**

198. (1) The sound **ʒ** was not a separate speech sound in English till modern times, and never had a spelling of its own. One source of **ʒ** is French, corresponding to the source of **ʃ** in *Charlotte* (§195 (2)). The Old French voiced sound correspond-

ing to voiceless **tʃ** (spelt *ch*) was **dʒ** (spelt *j* or *g*+*e*, *i*). This, like French **tʃ**, lost its stop element in later French and became **ʒ** as in present French *genre*. Some French words with this sound have come into Modern English with **ʒ** as *regime* **reˈʒim.** See below, §§208 (2), 211 (2).

(2) **ʒ** also developed in Early Modern English in a way exactly parallel to **ʃ** from **s** in *mission*. Remember that **z** is voiced **s**, and **ʒ** is voiced **ʃ**. As **mɪsɪən** first became **mɪsjən**, so **vɪzɪən** first became **vɪzjən**. Then just as modern *please you* **pliz ju** tends today to become **pliʒu**, so then **vɪzjən** became **vɪʒən**. The comparison of Figures 5 and 6 (p. 42) is equally applicable here, for the tongue positions for the change of **zɪ—zj—ʒ** are the same as for **sɪ—sj—ʃ**, with the addition of voice.

(3) When the **ɪ** sound was disguised by the spelling *-sure* as in *measure*, the sound change was the same: **mɛzɪur** became **mɛzjur** and then **mɛʒur, mɛʒɚ**. So with *azure*, *closure* **kloʒɚ**, *rasure*, *pleasure*, *seizure*, *leisure*, *treasure*, *usual* **ɪuzɪuəl—juzjuəl—juʒuəl.**[68]

h

199. (1) Repeat the organic description and the descriptive name of **h.**

(2) Comment on the sound and its spelling in *have*, *behind*, *who*, *whooping cough*, *exhaust*, *exhibit*, *John*, *ah*, *Sarah*.

(3) In what positions in the word can **h** occur? Why is it not doubled?

200. Pronounce the words *he*, *hat*, *high*, *hall*, *home*, *hoop*. Observe that the jaw, lips, and tongue tend to take shape for the different vowels **i, æ, u,** etc., at the very beginning of each word, without waiting for the **h** sound to be finished, so that so

[68] Some of these words originally did not have the **ɪu** sound, but had taken it on by analogy in time to undergo this Early Modern change.

far as **h** has any resonance quality, this varies according to what vowel follows.

To understand the nature of **h** it is necessary to observe the three ways of beginning a vowel sound. (**a**) If the vocal cords are firmly closed when breath pressure begins, and suddenly loosen to the position for voice (§36), we have a vowel beginning with a glottal stop (§56). (**b**) If the cords are placed in position for voice at the same time that breath pressure begins, we have the ordinary way of beginning an initial vowel in English, as in *I*, *old*. (**c**) If the cords are first wide open and then begin to close while breath is being emitted till they reach the position for voice, a slight fricative breath sound will precede the vowel. This breath fricative before voice begins may be stronger or weaker; but the speaker or the hearer is chiefly aware of the presence of the **h** sound by the manner in which the voice begins for the vowel with a certain momentum of breath from the previously open glottis, producing the effect of a stress pulse just when the breath "takes hold" of the vocal cords to set them into vibration, the breath being slowed by the vibration. Hence, even if the breath is expelled gently just before the **h** begins, the slight stress will be felt as the voice begins.

In English, this slight pulse invariably coincides with the beginning of a syllable. It also follows that **h** occurs only before sounds with unobstructed outflow of breath—the vowels, and the vowel-likes, the sonorants and glides, or semi-vowels. It actually occurs before **w** (**hwɛn**), **j** (**hjʉdʒ**). It could occur before **r** and **l**, as it did in OE **hrævɛn** "raven," **hlɑːf** "loaf"; though OE **h** and **r** were somewhat different from the present sounds. But since the articulation of **h** is entirely in the glottis, **h** can also be nasal before **m**, **n**, or **ŋ**. In certain nasal interjections, nasal **h** is a significant sound, as in **hm, hn,** which are very similar to **m̥m, n̥n** mentioned in §48, because of the **h**-like transition from the voiceless **m** or **n** to the voiced. The fact that the lips

are closed for **hm** and the tongue closes the mouth passage for **hn**, does not prevent the sound from being **h**, for **h** takes the mouth articulation of *every* sound which it precedes.

Before voiced fricatives **v**, **ð**, **z**, **ʒ**, however, **h** is not so easily made, for the narrowing for the fricative articulation in the mouth prevents the free passage of breath and the resulting contrast with the beginning of voice.

201. Although from a physiological point of view, **h** might be regarded merely as a manner of initiating vowels or vowel-likes, it is yet a genuine distinctive speech sound in standard English, distinguishing many words, as *I, high; old, hold; all, hall*, etc. Certain other breath sounds often designated by the letter *h* are not speech sounds, as the aspiration of **p, t,** or **k,** often designated as **ph, th, kh.** Its presence or absence in English does not distinguish words.[68a]

202. The **h** sound is sometimes voiced between vowels, as in *behind*. Here, without cessation of voice, the glottis opens sufficiently at **h** to give the contrasted freer movement of breath followed by the narrowed glottis again, which gives the impression of a **h** sound. Voiced **h** is not distinctive in English, and hence usually unobserved.

203. Transcribe your usual pronunciation of these words: (1) *heir, honor, honest, hour;* (2) *host, heretic, horrible, hospital, human, humane;* (3) *humble, herb, homage, humor, hostler, Humphrey*. In which group are you doubtful about any words?

These words and many others spelt with initial *h* were taken into English from Old French, chiefly during the 13th and 14th cc. The Latin originals of the French words had sounded the initial **h,** but in OF the sound had disappeared. In OF, however, and also after the words were adopted into English, the silent *h* was often written in imitation of the original Latin spelling.

[68a] For discussion of the view that **h** is a voiceless vowel, see Webster (1934), *Pron.* §44 (10).

Therefore when initial **h** is now sounded on any of these words, it has been restored through the influence of the spelling. This influence has gradually brought the **h** to be pronounced again on most of these words after having been silent all through the OF period and much of their English history. E.g., such words as *hospital*, *hostler*, *heritage*, *humble*, and others, had no **h** sound as late as the 18th c., and often still lack it. This is true of the more of these words the farther back we trace them. Note Uriah Heep's pronunciation of *humble*. British and American usage differ in some of these words today. Look up *herb*, *hostler* in Webster and Jones.

The words *able*, *arbor*, and some others belong to the same group. They lost *h* in their spelling also, and so have never regained the **h** sound.

204. Present English shows a tendency in some words, no matter what their origin, to drop **h** in syllables having little stress; as in *annihilate* **əˈnaɪəlet**, *forehead* **fɔɚɪd** (riming with *horrid*), *shepherd* **ʃɛpɚd**, *vehicle* **ˈviɪkl̩**. This is common in names; as *Haverhill* **hevɚɪl**, *Chatham* **tʃætəm**, *Durham* **dʒəm**, *Fulham* **fʊləm**. Pronouns unstressed in the sentence regularly lose initial **h**. In ordinary cultivated speech *He thought he saw him* is **hi θɔt i sɔ ɪm**. It would sound affected to say, **hi θɔt hi sɔ hɪm**—indeed, it would be difficult. But when the pronoun is somewhat stressed, as at the beginning of a statement, or under some special emphasis, **h** is retained, as in the example.

205. In the pronoun *it*, which is nearly always unstressed, and in *'em*, which always is so, the **h** has been permanently lost, even when *it* is occasionally stressed. In earlier English, however, and in present dialect, *hit* **hɪt**, is often found. Note Shakespeare's *Macbeth*, I, v, 50 ff.

> That no compunctious visitings of Nature
> Shake my fell purpose, nor keepe peace betweene
> Th'effect and hit.

Hit is common in southern American local dialect.

'Em is not, as commonly supposed, an abbreviated form of *them*, but of *hem*, a different word. *Hem* is a native English pronoun, while *them* was borrowed from Scandinavian. *Hem*, pronounced **əm**, has remained in cultivated use as a familiar colloquial form in unstressed position, but *them* has taken its place in stressed positions in familiar speech, and in both stressed and unstressed positions in formal speech and in literature. Compare "Did you take 'em?" with "I didn't take *them*, I took the others." The mistaken belief that *'em* is an abbreviation of *them* perhaps accounts for the use of the apostrophe in *'em*, while it is omitted in *it*.

206. The silent *h*'s thus far considered belong to cultivated British and American speech. Besides these, there is a tendency in the dialect speech of southern and central England either to drop or to add initial **h** where it is not done in cultivated speech. The facts are sometimes misunderstood, however. The mistaken idea that such speakers always drop **h** from words that should have it, and add it to those that should not, is no doubt due to the fact that the wrong pronunciations are noticed, while the right ones pass unobserved. The explanation is to be found in the fact that in those dialects **h** is no longer a speech sound, and the speakers of those dialects who have not learned to use **h** from standard English do not use it or hear it as a speech sound, since for them it is not distinctive. Though they frequently use it, it means no more to them than the aspiration of **p, t, k** does to the educated, who use it in certain positions, but pay no attention to it. So these dialect speakers use or omit **h** at haphazard, not knowing when they use it or not, or thinking they do when they do not, when speaking to the educated. They naturally often use **h** on strongly emphatic words beginning either with a vowel or with **h** in standard speech; but this use is not invariable.

The Affricates

tʃ

207. (1) Repeat the organic description and the descriptive name of **tʃ**.

(2) Comment on the sound and its spelling in *achieve, kitchen, righteous, question, creature, Dutch cheese.*

(3) The **tʃ** sound is one of the two English affricates that function as independent speech sounds (cf. §41). It is formed by a contact of the blade and a part of the front of the tongue at the border of the teethridge and hard palate, with consequent stoppage of the breath, followed by a slow explosive release that makes a fricative sound, with the tongue moving into the position for **ʃ**, the tongue front being nearly in the position for **j** (cf. Figures 5 and 6, p. 42). This fricative palatal release is an essential part of **tʃ** and cannot be omitted. The lips are sometimes protruded, but not usually in America.

(4) It has often been discussed whether **tʃ** and its voiced correlative **dʒ** are single sounds or two sounds each. Forchhammer[69] maintains that they are two. The matter is perhaps not of great importance for English, for in actual use they function as one speech sound. English **t** and **ʃ** do not combine in words to make **tʃ**, and neither element of **tʃ** can be omitted. Yet the double symbol conveniently suggests the double articulation (in fact there are many successive articulatory positions). Moreover, **tʃ** sounds have developed in English out of separate sounds (but not **t** and **ʃ**), as to be seen below (§208); and in French **tʃ** has become **ʃ** (§195 (2)).

208. (1) The **tʃ** sound in English has three sources. The oldest is from the OE palatal stop **c** (IPA symbol **c**; cf. §195 (1)). This developed a palatal fricative off-glide and produced the combination represented by IPA **tʃ**, in which the symbol **t** represents, not an alveolar **t**, but a tongue contact farther back toward the hard palate. This **tʃ** is found in native English words like *teach* **titʃ** (OE **tæːcan**), *child* **tʃaɪld** (OE **ciːld**).

(2) A **tʃ** sound came into ME from Old French. The OF **tʃ** sound mentioned above (§195 (2)) as having later lost its first

[69] *Grundlage*, p. 145.

element and become ʃ as in *Charlotte* and Modern French words (*charmant*, etc.) was taken into ME in a great number of words before it had changed from **tʃ** to **ʃ**, as in *Charles*, *chair*, *chain*, *charge*, *merchant*, pronounced in Chaucer and ever since with **tʃ**. Hence such pairs as *Charles—Charlotte* represent an earlier (ME) and a later (Early Modern) borrowing from French. See also **dʒ** and **ʒ** below, §211 (2). Other such pairs are *chair* **tʃæə**—*chaise* **ʃez**; *chandler* **tʃændlə**—*chandelier* **ʃændəliə**. Sometimes the influence of modern French has changed to ʃ a tʃ in words borrowed earlier, as *chivalry* (Chaucer **ˈtʃɪvɑlˌriə**), now **ʃɪvəlrɪ** but sometimes **tʃɪvəlrɪ** as formerly in English (see Webster (1934)).

(3) The third **tʃ** developed in Early Modern as follows. When the ending *-tion*, *-tial*, etc., in Latin and later in French was preceded by **s**, as in *question*, the **t** did not change to a **s** sound as it did in *nation*, etc. But **-tɪə(n)** changed in Early Modern to **-tjən**, paralleling the change of **-sɪən** to **-sjən** (§195 (3)). We have now to note the tendency of **tj** to become **tʃ** seen in present-day *meet you* **mit ju**, *don't you* **dont ju**, which usually become **mitʃu**, **dontʃu**. Comparison of Figures 5 and 6 (p. 42) will show how alveolar **t** followed by palatal **j** might easily lead to a more palatal **t** followed by a fricative off-glide that might either be a very close **j** or **ʃ**. It eventually developed into **tʃ**, so that Early Modern **kwɛstɪən** first became **kwɛstjən** and then **kwɛstʃən**. So in *bestial* **bɛstʃəl**, *Christian* **krɪstʃən**. The same change occurred in the combination **-tɪur**, as in *nature* **næːtɪur**—**næːtjʊr**—**netʃə**. So in *adventure*, *creature*, *feature*, *future*, *literature*, etc. It affected words in *-teous*, as *righteous* **raɪtɪəs**—**raɪtjəs**—**raɪtʃəs**. The same occurred in *beauteous*, *bounteous*, *duteous*, *piteous*, *plenteous*, pronounced in the 18th c. **bɪutʃəs**, **dɪutʃəs**, etc. But in these, spelling helped to restore the older **bɪutɪəs**, etc.

This change of **tj** to **tʃ** (as in *righteous* **raɪtʃəs**) is mentioned

in 1764, and must therefore have occurred considerably earlier. It affected all such words as *nature, fortune, courteous*, etc. The mistaken effort to restore the 17th c. pronunciation has succeeded in most of the words in *-teous* (**dɪutʃəs, bɪutʃəs,** etc., are now substandard), but in the other words (*nature, fortune, Christian*, etc.) **tʃ** is the normal cultivated pronunciation. Jespersen (*Gram.* I.12.41) says: "In some of the longer and more literary words, **-tjʊə** may be comparatively natural besides **-tʃə,** such as *literature, judicature.* But in all everyday words **-tʃə** is the only natural pronunciation, in spite of the efforts of some pedantic teachers who endeavor to reintroduce **-tjʊə,** often with the funny result reported by Grandgent in the Mod. Language Notes, May, 1894, p. 272." The incident referred to is thus reported by Professor Grandgent: "Once . . . a schoolmistress . . . turned suddenly upon her pupils—several of whom had for some time been brandishing their arms and calling, in a stage whisper, 'Teacher, teacher!'—and said to them: 'Now, children, which do you think is the right pronunciation, *teacher* or *teat-yure?*' And the class, with one voice, unhesitatingly responded, 'Teat-yure!' How could they answer otherwise? Had they not been carefully taught to say *nate-yure, fort-yune, ed-yucate*—clumsy combinations never heard from any human being outside of the class-room?"

209. In America the **tʃ** sound is usually preserved in words like *wrench* **rɛntʃ,** *inch* **ɪntʃ,** *gulch* **gʌltʃ,** which in England are sometimes, but not invariably, pronounced **rɛnʃ, ɪnʃ, gʌlʃ.** The word *Welsh* shows this variation in the spelling *Welch*—**wɛlʃ** being in this case the original form and also usual in America.

dʒ

210. (1) Repeat the organic description and the descriptive name of **dʒ.**

(2) Comment on the sound and its spelling in *joy, gentle, exaggerate, bridge, knowledge, soldier, verdure, George Jones.*

(3) State the relation of **dʒ** to **tʃ**. Observe that as a result of this relation, the tongue positions of the two sounds being the same, **dʒ** has the same history in the different particulars mentioned for **tʃ**.

211. (1) Thus like the OE voiceless palatal stop **c**. which became Modern **tʃ**, there was an OE voiced palatal stop (IPA symbol **ɟ**) which became modern **dʒ**, as in *edge, bridge.*

(2) As a **tʃ** sound came from Old French to ME in *chair, Charles*, etc., so an OF **dʒ** came to ME in words like *gentle, judge*, before OF **dʒ** lost its first element and became **ʒ** (as in Modern French *genre, gentilhomme*). Hence, as in the pair *Charles—Charlotte*, ME loan-words from OF have **dʒ** in *gentle, judge, regiment* **rɛdʒəmənt**, while modern loan-words have **ʒ** as in **reˈʒim, mɪˈrɑʒ, ɡəˈrɑʒ.**

(3) Again, paralleling the development of **tʃ** in Early Modern in *righteous, nature, fortune*, etc., a **dʒ** arose in words like *soldier, verdure, grandeur*, etc. Thus **soldɪər** became **soldjər**, and then **soldʒɚ**; **vɛrdɪur** became **vɛrdjʊr**, and then **vɝdʒɚ.**

(4) Another source of **dʒ** in English is from the voicing of **tʃ** by lack of stress (§140 f.) in unaccented syllables, as in *Harwich* **hæɚɪdʒ**, *Dulwich* **dʌlɪdʒ**, *Woolwich* **wʊlɪdʒ**, *cabbage* (ME *cabache*), *knowledge* (ME *knowleche*), *spinach* (OF *spinache, -age*). Look up the etymology of *partridge, sausage.*

The Sonorants

Nasals

m

212. (1) Repeat the organic description and the descriptive name of **m.**

(2) Comment on the spelling and the sound of **m** in *make, small* (§49), *amaze, common, dimmed, home-made, column, solemn, solemnity, autumn, autumnal, diaphragm, climb, limb* (§154 (2)), *salmon, calm.*

(3) State the relations (identities and differences) of **m** to **p** and **b**. To **n** and **ŋ**. For syllabic **m̩** see §§87–91; for voiceless **m** see §§48 f.

(4) OE **ˈæːmɛtɛ** became modern *emmet* **ˈɛmɪt**, and also, by loss of its middle vowel, became **ænt**. Explain the **n** from older **m**.

n

213. (1) Repeat the organic description and the descriptive name of **n**.

(2) Comment on the sound **n** and its spelling in *knife*, *gnaw*, *pneumonia*, *snail* (§49), *announce*, *sinner*, *unknown*, *penknife*, *mill* (earlier *miln*), *kiln*, *Milne* (**mɪl** or **mɪln**), *Milnes* (**mɪlz** or **mɪlnz**), *Milner* (**mɪlnɚ**). Compare *autumn—autumnal* with *Miln—Milner*.

(3) State the relations of **n** to **t, d, l** (see Figure 3, p. 41); to **m** and **ŋ**.

214. Many words were taken into ME from OF that had in French the palatal nasal (IPA ɲ) which may be approximated by planting the point of the tongue firmly behind the lower teeth and trying to pronounce **n**. As this was not a familiar sound to the English, it was replaced by them with **n**, but spelt *gn* as in French; as in *sign*, *benign*, *deign*, *impugn*, *reign*. What principle is here illustrated (see §177)? The words *foreign*, *sovereign* **sɑvrɪn, sʌvrɪn** never had this palatal ɲ sound. They were *foreine*, *sovereyn* in Chaucer, *forraine* in Shakespeare, and *sovran* in Milton. The spellings *foreign*, *sovereign* are imitations of *reign*, falsely based on a supposed connection.

(2) How do you account for the pronunciation of *signal* **sɪgnəl** (cf. *sign* **saɪn**), *assignation* **ˌæsɪgˈneʃən** (cf. *assign* **əˈsaɪn**)?

215. For syllabic **n̩** see §§87–91. Show by transcription whether you pronounce **n̩, ən,** or **ɪn** in the following words: *mitten*, *Britain*, *curtain*, *important*, *Latin*, *certain*, *mutton*, *mountain*, *sudden*, *pardon*, *garden*, *London*, *basin*, *mason*, *raisin*, *prison*, *pleasant*, *cushion*, *kitchen*, *pigeon*, *surgeon*, *soften*.

216. Note the following forms from Early Modern:

"Looke vpon **mine** affliction and **my** paine."—Ps. 25:18 (1611)

"Saue **thy** people, and blesse **thine** inheritance."—Ps. 28:9 (1611)

"It is **no** more of promise."—Gal. 3: 18 (1611)

"Make the promise of **none** effect."—Gal. 3:17 (1611)

"It is foule weather **in** vs all."—Shak. *Temp.* II.i.141 (1623)

"**I'** th'Commonwealth I would Execute all things."—*Ib.* 147.

Discover some reason for the presence or loss of the **n** in *my—mine; thy—thine; no—none; i'—in.* Cf. also *none other* (still in use), *handicap* (hand in cap) and *o'—of, a—on* in §137 at *of* and *on.* In what modern word has this treatment of final **n** become invariable? Avoid the common erroneous view that *none = no + one.* It is merely one form of *no,* like *a* and *an.*

ŋ

217. (1) Repeat the organic description and the descriptive name of **ŋ.**

(2) Comment on the sound **ŋ** and its spelling in *singer, finger, long, longer, England, anchor, instinct, conquer.* Compare the tongue positions for **ŋ** in *sing* and *song* (see **k, g**).

(3) In what positions in the word does **ŋ** occur? Why is it never doubled?

(4) Show by symbols just what sounds are spelt by the letters *ng* in *thing, linger, strength, cringing, engage.* What sounds do the letters *nk* represent in *ink, unkind, unknown?*

(5) When *running* is pronounced "runnin'," it is called "dropping the *g.*" Does this phrase exactly describe what happens? What does happen?

218. (1) Until Early Modern, the sound **ŋ** occurred only before **k** or **g** sounds. How does that explain why **ŋ** cannot begin words or syllables? How do you account for its presence in **æŋʃəs, æŋzaɪətɪ, lɛŋθ?** Explain **lɛnθ, strɛnθ.**

(2) Though commonly spelt with the two letters *ng* (*thing*), **ŋ** is a **single sound,** formed by a **single position** of the speech organs. State the relations of **ŋ** to **k** and **g** and to **n** (see Figures 4 and 3, p. 41). Before Early Modern, the letters *ng* always spelt the two sounds **ŋ+g,** as still in *linger* **lɪŋ-gɚ.** In Early Modern, final **g** began to be omitted in pronunciation from the group **-ŋg**—earliest from unaccented syllables, as in **ˈsi-ɪŋg—ˈsi-ɪŋ,** and later in all final positions, as **θɪŋg—θɪŋ.** The two sounds **ŋg** are kept when not final, as in **mɪŋ-gl̩, lɪŋ-gɚ, æŋ-gɚ, hʌŋ-gɚ, lɪŋ-gwɪst,** etc. Reconcile this statement with **sɪŋɚ, brɪŋɪŋ, kɪŋlɪ, sprɪŋɪ, lɔŋɪʃ.** Why do we say **lɔŋgɚ** but **lɔŋɪŋ? strɔŋgɚ** but **strɔŋlɪ? jʌŋgɪst** but **jʌŋɪʃ?**

(3) The foregoing pronunciations exemplify the fact that when **analogy** interferes with **phonetic tendency,** neither completely wins. The phonetic law stated in (2) wins in **lɪŋgɚ, sɪŋgl̩, hʌŋgɚ, æŋgɚ, lɪŋgwɪst, lɔŋgɚ, lɔŋgɪst, strɔŋgɚ, strɔŋgɪst, jʌŋgɚ, jʌŋgɪst;** but analogy wins in **sɪŋɚ, lɔŋɪŋ, kɪŋlɪ, strɔŋlɪ, jʌŋɪʃ.** Explain how this is true in each of the examples. If you wished to say "This answer is wronger than the other," would you say **rɔŋɚ,** or **rɔŋgɚ?**

219. The substitution of **-ɪn** for **-ɪŋ** in words ending in *-ing,* as *coming, doing,* etc., was once more widespread than now. It is now by no means unusual among the educated and higher classes, as well as the illiterate and speakers of dialect. The tendency to be "correct" by pronouncing **-ɪŋ** in place of the once general **-ɪn** is probably an instance of spelling-pronunciation. According to Wyld, **-ɪn** is still common among the higher classes in Southern England.[70] In America it appears to be more com-

[70] *History of Modern Colloquial English,* p. 289. Authorities (Wyld, Wright) cite early (14th c. on) spellings like *holdyn, walkyn, fardin, standyn,* etc. as evidence of the pronunciation **-ɪn** for **-ɪŋ.** These could just as well be evidence for the change from **-ɪŋg** to **-ɪŋ.** In fact, that would be the only natural way to express **-ɪŋ** till after the complete loss of final **-g** from **-ŋg.** The same spelling

mon among the educated in the South than in the North and East. The spelling-pronunciation **-ɪŋ** for *-ing* is now so general that it is in excellent usage; but it must not be hastily concluded that the pronunciation **-ɪn** instead of **-ɪŋ** in *coming, going*, etc., is necessarily a mark of ignorance or lack of cultivation. It is still commoner than most people suppose. It is a good illustration of the ignorant "muddling through" by which forms and usages regularly become established in standard use. Hundreds of people have religiously practiced saying **kʌmɪŋ** instead of **kʌmɪn** without ever intelligently considering the facts, or whether the effort was worth while. What would now be thought of a teacher or critic who, acquainted with the earlier facts, should also insist on restoring the old stop **g** to the combination **-ɪŋ**, making it **-ɪŋg** as it is spelt? We condemn the speech of the dialect speaker who has preserved the complete ending **-ɪŋg** (with devoiced **g**) in "*somethink*," "*anythink*" (cf. **lɛŋkθ, strɛŋkθ**). We condemn as dialectal a statement like "**wɔk raɪt əlɔŋgɪə** (*along here*)," made to the author in Coventry, in which there is no "dropping of the *g*"! For syllabic **ŋ** see §§87–91.

The Lateral

l

220. (1) Repeat the organic description and the descriptive name of **l**.

(2) Comment on **l** and its spelling in *elect, Ella, elm, little, all, calm, almond, half, folk, yolk, solder*.

(3) Pronounce the word *haul*, continuing the **l** as long as possible. Observe that the point of the tongue is against the teethridge, and that the voiced breath passes out on one or both sides of the tongue. See whether your own **l** is bilateral or uni-

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would continue after **-ɪŋ** became **-ɪn**. On the other hand, it is very likely that **-ɪn** began to be used by many almost immediately after **-ŋg** changed to **-ŋ**.

lateral. Pronounce *illness* and then state the exact difference between **l** and **n.** Pronounce *salt* and *scald,* and state how **l** differs from **t** and from **d.** What is common to the formation of **l, n, d, t?** Compare *retain* and *battle* **bætl̩** to discover the difference in the manner of exploding the **t.** Do the same for the **d** in *ready* and in *saddle* **sædl̩.**

221. Since **l** is a voiced oral continuant, there is a vowel-like resonance in the sound. Though the tongue point remains in contact with the teethridge during the continuance of the **l** sound, the rest of the tongue is somewhat free to assume various vowel positions. In fact, there are as many differently sounding **l**'s as there are different vowels. If **l** has the resonance of a front vowel (see chart, p. 66), as in *leave,* it is often called 'clear' **l;** if it has that of a back vowel, as in *feel,* it is called 'dark' **l.** In South England 'clear' **l** is found before vowels in the same syllable, as in *lily, low;* and 'dark' **l** before consonants, as in *field, elder;* finally, as in *feel, full;* and when syllabic, as in *little* **lɪtl̩,** *rattling* **rætl̩ɪŋ,** *rattled* **rætl̩d.** The same is generally true in America, but here many speakers use a slightly 'dark' **l** before vowels, and a 'darker' one in the other positions; and others, especially in the South, use 'clear' **l** in nearly all positions.

When 'dark' **l** is sounded, the hearer is apt to hear an **ʊ** sound with it, and before some consonants may not hear at all the **l** proper (i.e., the contact of the point of the tongue with the teethridge). Thus in dialect speech, *calculate* **kælkjəlet** is often pronounced **kaʊkəlet** because the 'dark' **l** before **k** was heard and imitated as **ʊ.** So a child says **ɪtʊ** for **lɪtl̩** because he does not distinguish the initial 'clear' **l** from the following front vowel **ɪ,** and hears the final 'dark' **l** as **ʊ.**[70a] This change of 'dark' **l** to **ʊ**

[70a] One child whose family perhaps used initial 'dark' l's, habitually said **ʊkʊ** for **lɪtl̩.** Explain both **ʊ** sounds.Why was **k** sounded for **t?** Recall that **ʊ** is a high-back vowel, and see §96.

Explain the frequent child's pronunciation **mɪʊk.**

was universal in Old French; so Vulgar Latin *palmu* became OF *paume* **pɑumə**, Modern French **poɪm**. Hence in ModFr only 'clear' **l**'s are used, for all 'dark' **l**'s have changed to **u**. In Italian, on the other hand, 'clear' **l** turned into **ɪ, j**; so VL *platea* became Italian *piazza* **pjattsɑ**. In English, 'clear' **l** has remained **l**, while after certain vowels 'dark' **l** has developed an **u**, as after **ɑ**; so ME **ɑl, sɑlt** became 15th c. **ɑul, sɑult**, and then **ɔl, sɔlt**. Before some consonants, the tongue point ceased to touch the teeth-ridge; so ME **tɑlkən** became **tɑuk**,[71] and then **tɔk**; before others, both **u** and **l** were lost; so ME **hɑlf** became **hɑulf**, and then **hɑf, hæf**.

222. The change of **ɑl** to **ɑu** and then **ɔ** took place in these native English words from the 15th to the 18th cc. (The change from **ɑu** to **ɔ** was regular in all English words.) But in another group of words, as *altar, fault, vault*, borrowed from Old French, the change of **ɑl** to **ɑu** had already taken place before the words were taken into English, and afterwards in English **ɑu** became **ɔ** as in all other English words that had it. In the words *altar, fault*, etc., the **l** had become silent before the words became English, and continued silent till well into the 18th c., though very often written. Note the rime from Goldsmith:

> Yet he was kind, or if severe in aught (**ɔt**),
> The love he bore to learning was in fault (**fɔt**).

Finally, owing to the influence of the written *l* in these French loan-words, which was retained in imitation of the original Latin forms, the **l** sound was restored to most of them. So the **l** sound in **ɔltə, fɔlt, vɔlt** is a spelling-pronunciation. See §150. For syllabic **l̩**, see §§87–92.

[71] The intermediate stage **tɑuk** has been reported from present Southern American dialect.

The Glides

w

223. (1) Repeat the organic description and the descriptive name of **w.**

(2) Comment on the sound and its spelling in *water, swing* (§49), *dwell, persuade, quart, anguish, memoir, choir, one, once, toward, answer, sword, write, wrong, two, sorrow, snow, how.*

(3) In what position in the words does the **w** sound occur? Why is it not doubled? Account for the name and the form of the letter.

224. Pronounce before a mirror the words *wood, woe, wall, watch, way, we.* It will be observed that at the beginning of each word the lips contract into a small circle. On reaching the sound of **u** in *wood,* the lips widen a little, then a little more for the **o** of *woe,* and successively more for the vowels **ɔ, ɑ, e, i.** See Figure 8, p. 62. A similar result may be got by pronouncing a very brief **u** before each of these vowels, with the accent on the second element, thus **u-ˈo, u-ˈɑ, u-ˈi.** If care is taken not to dwell on the **u,** but to make the transition quickly and continuously to the following vowel, the result will be practically a **w** followed by the vowel. Compare the two pronunciations of *bivouac,* **ˈbɪv-u-æk** and **ˈbɪv-wæk.**

The experiment reveals several facts. (1) Strictly considered, **w** is not precisely even a brief **u** before another vowel, for that implies a *fixed position* of the lips and tongue for the duration of the vowel, as in **æ, i.** In describing **w** the symbol **u** merely indicates the position of the lips and tongue at the beginning of **w.** In forming **w** the lips and tongue begin at once to take the position for the following vowel. The action of the speech organs in this is like that in forming the true diphthongs **aɪ, aʊ,** etc. See §§327 ff. **w** is therefore not a consonant uniform during its whole utterance like **s, v, m,** but is a glide sound, made while the lips and tongue are in motion. See §380.

(2) In **w**, though the continuous movement begins in a similar position, it proceeds and ends entirely according to the nature of the vowel that follows. In reality, therefore, the symbol **w** stands for as many different sounds as there are different vowels. In fact, **w** passing continuously into the various vowels that follow it constitutes a whole group of diphthongs, differing from such a diphthong as **au** in having the stress on the second part instead of the first. Observe that the lips are more closely rounded for **w** than for the following vowel; hence **w** is most closely rounded before **u**, and less so before **o, ɑ, æ, i**, etc.

(3) The sound that the ear recognizes as **w** is not the friction of air on the lips, though a frequent description is that of a lip fricative, but is the quick and continuous modulation of the voice by the motion of the lips and tongue in passing from the **u** position to that of the following vowel.

(4) It follows that **w** can occur only before a vowel sound. It cannot be pronounced without this following vowel. An attempt to pronounce **w** alone results in **wə**.

225. There is a tendency for **w** to become silent in unaccented syllables, especially in names. Note the British pronunciation of *Warwick* **wɒrɪk**, *Greenwich* **grɪnɪdʒ**, *Norwich* **nɒrɪdʒ**. The village of *Brunswick, O.*, was always called **brʌnzɪk** by its early inhabitants. The family name *Woodward* is often pronounced **wʊdəd**. *Awkward, backwards, forwards* in the 18th c. were regularly **ɔkəd, bækədz, fɔə-ədz**, as now in dialect; and *towards* is regularly **toədz**. Sometimes the *w* has disappeared in spelling also, as in *Edinburgh*, Scotland, **ɛdn̩bʌrə**, from older *Edwinesburch* ('Edwin's town'); in the family name *Gouldin* **goldɪn** from earlier *Goldwin; Aylard* **eləd**, from *Æthelweard*. Spelling-pronunciation has restored many of these lost **w** sounds, as in *Cromwell, Sandwich*, etc. The student should watch for other examples.

hw

226. For **hw** as the voiceless correlative of **w**, and for the distinction between **hw** and voiceless **w** (IPA ʍ), see §46 and Webster, *Pron.* §45. In the author's speech, and he believes in America generally, when the sound is used at all it is **hw** rather than voiceless **w**, with the usual conformation of the mouth for **h** to that of the following sound.

227. The distinction between **hw** and **w** by which, e.g., *whether* is distinguished from *weather* is still standard usage in America, though there are a great many speakers who do not make the distinction. Reliable statistics are lacking as to whether the substitution of **w** for **hw** is increasing here. It has probably been frequent for many generations.

In the standard speech of South England the distinction is no longer usual except as it is made by some individuals as a spelling pronunciation, or from a desire to avoid homophones.[72] Hence in Southern British the following are homophones: *whale—wail; wheel—weal; what—watt*, and many more. But in Northern England, Scotland, and Ireland the distinction persists as in America.

228. In the expletive and the interjection *why*, **w** is usually heard, while in the interrogative *why?* **hw** is usual in America. Thus the following would be usual: **"waɪ! hwaɪ dɪdʒu du ðæt?" "waɪ, aɪ dont no."**

j

229. (1) Repeat the organic description and the descriptive name of **j**.

(2) Comment on the **j** sound and its spelling in *year, used, ewe, Europe, unite, opinion, regulate, volume, particular, familiar, behavior, hallelujah.*

[72] The distinction is observed by Mr. F. G. Blandford in his excellent pronunciation of "Everyday Sentences in Spoken English" (Linguaphone Records).

(3) In what positions in the word does **j** occur? Can it be doubled? For the tongue position of **j**, see Figure 5, p. 42, and for its effect on **s**, §195 (3).

230. Pronounce the vowel **i** before the words *oak*, *ell*, *am*, allowing the voice to glide from **i** to the following word, and stressing the second part in each case. Observe that the more quickly you pass from **i** to the following vowel, the more these words sound like *yoke*, *yell*, *yam*. Thus it is seen that **j** is a glide sound made by the modulation of the voice as the tongue moves continuously from the position for **i** to that for another vowel. It is thus parallel to the glide **w**—the tongue, instead of the lips and tongue, forming the glide. As with **w** also, an actual **i**—a fixed vowel—is not made, but the tongue only starts with the position for **i** and immediately moves toward that for the following vowel. So too, **j** can occur only before vowels, and, as with **w**, **j** and its following vowel constitute various diphthongs with rising stress. One of them, **ju**, is the diphthong **ɪu** with the stress shifted.

231. In the author's dialect, **j**, like **w** and **r**, has no audible sound except the modulated voice. To the ear, the impression of a consonant, rather than a vowel, is given because of the rapidity of the voice modulation by the movement of the tongue. There is no audible friction of air between the tongue and the hard palate.

232. Some phoneticians describe **j** as a palatal fricative, and this may be true in some regions or with some speakers. This can be tested by attempting to produce with the breath a natural **j** sound without using either the speaking or the whispering voice. The fricative, when used, is made by pressing the tongue a little closer to the front palate than for **i**, and holding it there while the breath is forced over it. An approach to the fricative **j** is heard when the sound is followed by the vowel **i** as in *ye*. Here the tongue is pressed for an instant a little closer

than for **i**, so that a slight lowering of the tongue is perceived in passing to the **i** of *ye*, and a slight acoustic difference is heard between **j** and **i** of **ji**. In this respect cf. the nature of **w** in **wu**. Like **w**, **j** is closest (highest) and most resembles a fricative sound before **i**, the vowel most like it, as **u** is most like **w**.

233. What sounds are spelt by the letter *y* in *day*, *boy*, *sky*, *steady*, *aye* ("yes"), *myrtle*, *martyr*, *analysis*, *yet?* Is the letter *y* used in any way not paralleled by *w?*

r

234. (1) Repeat the organic description and the descriptive name of **r**.

(2) The consonant **r** is a glide sound. Just as **w** is made with the lips and the tongue, or **j** with the tongue alone, starting in the position for a vowel **u** or **i** and moving to the position for a following vowel, so **r** starts with the tongue in the position for a vowel and moves toward that of the following vowel, as in *rate* **ret**. In the case of **r**, the vowel position from which (in the author's speech) the tongue movement starts is that of the vowel in *hurt* **h3t**—a simple vowel with the tongue point turned toward the hard palate, or retroflexed. Not all speakers of GA have exactly the same tongue position for the vowel as for the beginning of the consonant, but the formation is analogous. The degree of retroflexion varies; in some cases the tongue for **r** is merely raised toward the teethridge; in others it is merely retracted and laterally contracted; but the acoustic effect is strikingly similar. If the tongue be fixed in the starting position for the **r** in *rate* and voice uttered, the vowel ɜ in *hurt* **h3t** is made. Hence, combinations of **r**+any vowel[73] form rising diphthongs exactly as do **w** and **j** in *we*, *woe*, *ye*, *you*.

[73] Except with ɜ and ɚ. **r** rarely if ever occurs before ɜ. Before ɚ in *error* ɛɚ-ɚ I find in my pronunciation that the tongue makes a diphthong ɛɚ, and then moves quickly down and back again to the raised position for the unaccented syllabic vowel ɚ. Thus *error* might justifiably be transcribed ɛɚrɚ. I here tran-

235. Just as there is no fricative sound in **w, j,** so in **r** the only sound conveyed to the ear is voice, modulated, as in **w, j,** by the movement of the tongue toward the position for the following vowel (see §71). When **r** follows **t** (*try*), **d** (*dry*), and to some extent when after **ʃ** (*shriek*), **z** (*misery* **mɪzrɪ**), it is fricative. But the friction is not significant or distinctive, being due to neighboring sounds, and so constitutes no exception to the general character of nonfricative **r.**

236. It has long been recognized that there is a marked difference between **r** before vowels and the sound spelt *r* after vowels, as in *far.*[74] The difference is so great that in large areas of the English-speaking world only prevocal **r** has survived. For GA, I have reached the conclusion also arrived at by Mr. Joos and others that the postvocalic sound written *r* is the nonsyllabic vowel element of a falling diphthong (§328) which is here written **ɪɚ, ɑɚ, ɔɚ, ʊɚ,** etc., analogously with **aɪ, aʊ,** etc. These correspond exactly to the British centering diphthongs **ɪə, ɔə, ʊə,** etc.[75] For further discussion, see **ɜ, ɚ,** and the *Diphthongs* under *Vowels in Detail.*

237. Other varieties of consonant **r** exist, as the tongue-point trill, both prevocal and postvocal, the fricative **r,** still described as usual in Southern British, though Sweet described it as without fricative quality,[76] the frictionless continuant **r** of England, and the uvular trill of Northumbrian dialect, French, and German. Prevocalic (consonant) **r** occurs in all types of standard English wherever it is spelt in the written language.

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scribe it **ɛɚ-ɚ,** considering the tongue movement as a transition sound not requiring to be written. See further at **ɚ.**

[74] Cf. Ben Jonson, *English Grammar,* 1640: "It is sounded firme in the beginning of the words, and more liquid in the middle and ends: as in *rarer, riper.*" Quoted by Grandgent, *Old and New,* p. 44.

[75] This, in principle, is the treatment of postvocalic *r* given by Mr. Martin in Palmer, Martin, and Blandford, *Dictionary of English Pronunciation with American Variants.*

[76] *Sounds of English,* §122. Jones, *Phonetics,* §§747, 796.

238. In Southern British, in Eastern New England and most New England larger cities, in the speech of the natives of New York City and suburbs, and of the larger part of the South, *r* (either the consonant or an "*r*-colored" vowel) is pronounced only before a vowel in the same or a closely following word. More specifically, when no vowel follows, what is pronounced in GA as ɝ in *fur* **fɝ** appears in the regions mentioned as **ɜ—fɜ**; what appears in GA as ɚ in *better* **bɛtɚ**, appears there as **ə—bɛtə.** The centering diphthongs **iɚ, ɪɚ, ɛɚ, æɚ, oɚ, uɚ** there appear as **iə, ɪə, ɛə, æə, oə, uə.** The GA diphthong **ɑɚ** there regularly loses its second element and becomes **ɑ,** and GA **ɔɚ** often does likewise: **ɔ(ə)**. The following words show (before the dash) the GA and (after the dash) the British, Eastern, and Southern American corresponding forms **when no vowel follows:**

fur **fɝ—fɜ**
firm **fɝm—fɜm**
better **bɛtɚ—bɛtə**
fear **fɪɚ—fɪə**
feared **fɪɚd—fɪəd**
fare **fɛɚ—fɛə**
fared **fɛɚd—fɛəd**
fare **fæɚ—fæə**
fared **fæɚd—fæəd**
four **foɚ—foə**
gourd **goɚd—goəd**
sure **ʃʊɚ—ʃʊə**
assured **əʃʊɚd—əʃʊəd**
far **fɑɚ—fɑ**
farm **fɑɚm—fɑm**
for **fɔɚ—fɔ(ə)**
form **fɔɚm—fɔ(ə)m**
fire **faɪɚ—faɪə**
fired **faɪɚd—faɪəd**
sour **saʊɚ—saʊə**
soured **saʊɚd—saʊəd**
cure **kɪʉɚ—kjʉə**
cured **kɪʉɚd—kjʉəd**

In Southern American speech, instead of accented **ɜ,** an "*r*-colored" vowel varying to ɝ is often heard. See §§305–11.

239. When a vowel follows in the same word, as in *furry, flattery, weary, very, carry, starry, warring, story, surest,* in the "*r*-less" regions named the *r* sound is retained as (probably)

an intervocal consonant: **fɜrɪ, flætərɪ, wɪrɪ, vɛrɪ, kærɪ, stɑrɪ, wɔrɪŋ, stɔrɪ, ʃʊrɪst;** but in Eastern America there is evidence that this may often also change to the *r*-colored nonsyllabic vowel ɚ as the second element of centering diphthongs, similar to those in GA: **wɪɚɪ, vɛɚɪ, ʃʊɚɪst,** etc. Organically there is little difference. Whether the sound is vocalic or consonantal depends on whether the syllabic pulse occurs before or after the main part of the *r* sound, just as in the case of **ʊ** or **w** in *situation* **sɪtʃʊ-ˈeʃən** or **sɪtʃəˈweʃən;** that is, on whether it is **wɪ-rɪ** or **wɪɚ-ɪ.** And in the pronunciation **wɪ-rɪ** there is often some degree of *r*-colored glide at the end of **wɪ-** before the consonant movement of **-rɪ** begins. It is difficult, and often arbitrary, to distinguish between the consonant **r** and its on-glide **ə,** which is often *r*-colored, and therefore ɚ. See also *Intrusive* **r,** below.

240. Linking r. When a vowel follows at the beginning of the next word, the nature of the *r* sound is the same, which will here be indicated as the consonant **r,** with the qualifying variations mentioned above. This is called **linking r,** since **r** that was formerly pronounced is here restored and makes an easy transition from the preceding word to the following initial vowel. Thus in the "*r*-less" territory we find such pairs:

fur **fɜ**—*the fur is wet* **ðə fɜrɪz wɛt**
flatter **flætə**—*flatter us* **flætərəs**
hear **hɪə**—*hear us* **hɪrəs**
care **kæə**—*care at all* **kærəˈtɔl**
far **fɑ**—*far away* **fɑrəˈwe**
war **wɔ**—*war is over* **wɔrɪz ovə**
more **moə**—*more attractive* **morə ˈtræktɪv**
sure **ʃʊə**—*sure effect* **ʃʊrəˈfɛkt**
fire **faɪə**—*fire is out* **faɪrɪz aʊt**
our **aʊə**—*our idea* **aʊraɪˈdiə**
cure **kjʊə**—*cure it* **kjʊrɪt**

241. Intrusive r. In the examples of linking **r** shown above, it will be observed that in the "*r*-less" regions all words ending in a written *r* have two forms, one without an *r* sound, when no vowel follows (**hɪə, kæə, ʃʊə**), and the other with linking **r,** when a vowel follows (**hɪrɪˈtɪz, kærəˈtɔl, ʃʊrəzˈfet**). Thus the

speakers have become accustomed to such pairs as **hɪə—hɪr, kæə—kær, ʃʊə—ʃʊr,** the second of each pair only before vowels. Hence it is also natural that such words as *idea* **aɪˈdiə,** *sofa* **sofə,** *America* **əˈmɛrəkə,** *Ada* **edə,** *Maria* **məˈraɪə** should seem to end exactly like words with final silent *r* (**hɪə,** etc.) and therefore natural to add the **r** in the same way when a vowel follows: *the idea of it* **ðɪ aɪˈdiər ɒv ɪt,** *the sofa is new* **ðə sofər ɪz njʉ,** *America and England* **əˈmɛrəkər ənd ɪŋgləndˌ** *Ada Ann* **edər æn,** *Maria Eads* **məˈraɪər idz.**[77] This is called **intrusive r.** Observe that linking **r** is the use between words of an *r* that is spelt and was formerly pronounced (as now in GA); while intrusive **r** is the use, in the same way, of an *r* sound that is not spelt and was originally not sounded. It is a very common practice among cultivated speakers in England and Eastern America(but apparently not in Southern America). The evidence of its universality in these regions is so overwhelming that it is mere ignorance of the facts of cultivated usage to deny it.[78] Though one may choose to avoid it, there is hardly warrant for condemning it in others as "incorrect."[79]

[77] Examples like the last two lead one to suspect that linking and intrusive **r** are often also vocalic rather than consonantal outside of GA. It has been observed to be so to some extent in New England by field workers on the *Linguistic Atlas* (I am indebted to Mr. Martin Joos and Professor Miles L. Hanley for this information). It seems highly probable that many speakers in the territory of intrusive **r** distinguish, by the syllable division, between *Ada(r) Ann,* and *Ada ran,* or between *Maria(r) Eads* and *Maria reads;* so that in the first meaning they would say **edəˈræn, məˈraɪəˈidz,** and in the second meaning **edəˈræn, məˈraɪəˈridz.** More complete investigation on this particular point is needed.

[78] See Jespersen, *Gram.* I, 13.42 ff., where much evidence is given; Jones, *Phonetics,* §759; Webster, *Pron.* §213. Intrusive **r** is less common after **ɑ** (which is rarely final) and **ɔ,** as in *the law of the drama* **ðə lɔr əv ðə drɑmə.**

[79] The objection to intrusive **r** is a curious illustration of how fashion dictates what people shall be sensitive about in speech. The objectors are themselves using without a qualm (because in ignorance) many sounds not originally

242. Linking **r** is sometimes omitted in Southern British, and the omission appears to be increasing. It is perhaps in part due to reaction against the use of intrusive **r.**[80] In the South of America, though **r** is regularly preserved before a vowel in the same word, as in *starry* **stɑrɪ,** linking **r** is very often omitted, as in *more ice* **moə aɪs.**[81]

243. In a few words the loss or the addition of an *r* sound has become general in America. Examples in cultivated use are: *surprise* **səpraɪz,** *worsted* **wʊstɪd,** *governor* **gʌvənə˞,** *thermometer* **θə|mɑmətə˞,** *caterpillar* **kætəpɪlə˞**; in substandard or dialectal use: *holla* **hɑlə˞,** *fellow* **fɛlə˞,** *burst* **bʌst,** *curse* **kʌs.**

For further matter on the *r* sounds see the *r* vowels **ɜ, ɚ, ɜ,** and the *Centering Diphthongs.*

Vowels in Detail

i

244. (1) Repeat the descriptive name of **i.**[82]

(2) Comment on the sound and its spelling in *be, see, these, breeze, people, receive, believe, key, ravine, idea, suite, Caesar, Phoebe, reiterate, atheist.*

(3) What is the difference in sound between the first and the second vowel in *deceive?* Between the sound of *de-* in *deceive* and *deportation?* For the diphthongal quality of **i,** see §34.

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present in words, some of them (most of them at first) not represented by the spelling, as **w** in *one, once;* and on the other hand, they are not in the least sensitive about omitting the **r** sound that is spelt, and was originally pronounced.

[80] See Jones, *Phonetics,* §758.

[81] Read, *Jour. Eng. and Germanic Philol.,* April, 1923, p. 222, says that the Southern practice does not differ essentially from Southern British. But it is my impression that in Southern America linking **r** is much more often omitted than in England. Intrusive **r** seems to be rare in the South.

[82] The student should from the first associate each vowel with the description of its tongue and lip position. When the lip position is not mentioned, it is assumed that the lips are not rounded. See §79 and Fig. 9, p. 66.

245. What is the usual Irish dialect pronunciation of *tea, speak, repeat?* What can you infer about cultivated 18th c. pronunciation from the following rimes in Dryden and Pope: *obey:sea; great:repeat; way:sea; awake:speak; great:seat; great:eat; days:ease; away:tea?* Other local dialects throughout England and Scotland also have the same pronunciation of *tea, repeat,* etc. Make an observation on the historical relation between these pronunciations and standard English pronunciation of the same words. Note that the words now sounded with **i** are spelt with *ea.* What words so spelt have kept their 18th c. pronunciation? Can you give a reason for the pronunciation of *yea?* Compare these further rimes from the same authors: *mien:seen; be:see; scene:spleen; yield:steeled.* The *ea* in these words spelt the Early Modern sound **eɪ,** and *ee* or *ie* spelt **iː** as now. Words of the *ee*-class, such as *green, meet, see,* are pronounced in Irish dialect in the same way as in standard English except as analogy has operated; e.g., *speech* is pronounced **spetʃ** by analogy of *speak* **spek.** Would it be accurate to represent an Irishman as saying, **"aɪl metʃu ɒn ðə gren"?**

246. Look up in the *Oxford,* Jones, or Webster, the words *either, neither, Elizabethan, leisure, penal, penalize, penalty.*

What is your customary pronunciation of *been, creek, sleek, breeches, breeching, steelyards?*

247. The word *creek* in ME had two forms: *crike* pronounced **krɪkə,** and *crek,* pronounced **kreːk,** which resulted from lengthening the **ɪ** in *crike* (see §83, note 40). The first, **krɪkə,** became present English **krɪk,** which is still current throughout America, and **kreːk** became **krik,** now spelt *creek.* The prejudice often encountered against the pronunciation **krɪk** is due to ignorance of actual historical usage and to reverence for the spelling. The word *sleek* has the same history, now preserved in the two spellings *slick* and *sleek,* with meanings not yet entirely separated. Consult the dictionary. On the other hand, just as *breeches,*

breeching, steelyards, pronounced by people familiar with them, were shortened to **brɪtʃɪz, brɪtʃɪŋ, stɪljəˑdz,** so the words *livelong* **ˈlɪvˌlɔŋ,** *nickname* (§93), *rick, riddle, sick, silly* all were once spelt *ee* and pronounced accordingly with the long vowel (ME **eː**, Modern Eng. **iː**), and later shortened to **ɪ.** As they are now also spelt with *i*, no one attempts to restore the early pronunciation, as is done in *breeching, steelyards* by those unfamiliar with the things themselves. Reflect on this process; it is typical.

248. Lack of stress usually shortens and slightly lowers a long vowel except a low one. E.g., *been* is often unstressed in the sentence. At a time when it was pronounced **beːn** if stressed, it was pronounced **bɛn** if unstressed. Later, after historical vowel shift had changed the stressed form **beːn** to **biːn** (see §10), then the unstressed form became **bɪn.** Now **bɪn** is the regular form, both stressed and unstressed, in America, and **bin** is the prevailing form in England, while **bɛn** is a dialect form, but still widely current.

249. Note the second vowel in *studying*. It is a little higher than the **ɪ** of *-ing*, and is therefore represented as **i.** This very brief **i** occurs oftenest unaccented before **ɪ,** as in *atheist, pitying, happiest* **hæpiɪst,** *twentieth* **twɛntiɪθ.** When unaccented before other vowels than **ɪ,** the sound varies between **i** and **ɪ,** as in *chariot* **tʃæəˑɪət,** *reality* **riælɪtɪ, rɪælɪtɪ,** *radiate* **rediet, redɪet.**

ɪ

250. (1) Repeat the descriptive name of **ɪ.**

(2) Comment on the sound and its spelling in *mill, hymn, England, sieve, busy, business, women, build, pretty, Greenwich.*

(3) *England, English, ink, link, linger, wing* all formerly had the same vowel sound **ɛ.** What has happened to sound and spelling? Is the pronunciation **ɪndʒən** for *engine* a mere "mispronunciation"? Comment.

(4) What vowel do you pronounce in the first syllable of

really, theater? What is the difference of meaning in **bɪznɪs** and **bɪzɪnɪs**? What do these words and the words *slick, sleek* show about the way words split up into different words, finally becoming as distinct as *human* and *humane?*

(5) Which is the longer vowel, the "short *i*" of *sins* or the "long *e*" of *seat?*

251. The pronunciation **waɪnd** for the noun *wind*, heard in singing, and often found in verse riming with words like *find*, is regarded as exceptional. If compared with *behind, bind, find, grind, hind, kind, mind, rind*, which appears exceptional, **wɪnd** or **waɪnd?** In *windy, windmill, windfall* the *i* has always been **ɪ**. Does that throw any light on the pronunciation **wɪnd?**

252. In OE the letter *y* spelt a lower high-front-round vowel and *i* spelt the lower high-front unrounded vowel **ɪ**. Later the first vowel lost its lip rounding and became **ɪ**, but long continued to be spelt with *y*. What light does this throw on such modern spellings as *copy, copies, staid, stayed*, and the general interchange of *i* and *y?*

253. Unstressed ɪ. The unaccented final sound of words like *ready* varies considerably in different regions, with different speakers, and according to what sounds immediately follow in actual speech, as *Are you ready? I'm ready to go; I shall be ready in a moment; a ready answer*, etc. This unaccented sound varies from a higher sound suggesting, but not reaching, the **i** of ˈ*trochee* ˈ**troki** to a lower sound suggesting the **ɛ** of *met.* The same sound occurs, and varies likewise with many speakers in nonfinal unaccented positions, as in *limit, added, roses, goodness.* It should be noted that the use in *roses, added, goodness* of a sound resembling **ɛ** has nothing to do with the fact that it is spelt with *e*, for when the sound is natural to speakers, and not merely a spelling-pronunciation, it also occurs in words spelt with *i* or equivalent; as in *limit, Cambridge, walking, solid,*

village, etc. This ɛ-like sound is less usual in America than in England, the two principal varieties here being ɪ and ə.

254. It would sometimes be useful for certain purposes (as in study of dialect; see §35) to use a special symbol for the unstressed ɪ just as ɜ and ɚ, ʌ and ə are distinguished as stressed and unstressed; and this has sometimes been done. Yet it is customary with many phoneticians to use the one symbol ɪ for both, and in practical teaching the author has experienced no difficulty thereby. In this book, therefore, the variation of unstressed ɪ is indicated only when it reaches the stage ə. If teachers prefer to use a special unstressed symbol, the one devised by Dr. Palmer may be used.[83] Or the printed form of an italic *i* without the dot would serve.

255. Transcribe the following according to your easiest pronunciation, being careful not to be influenced by the spelling in the unaccented syllables: *benefit, roses, ended, hostess, goodness, endless, besides, scarlet, women, forfeit, money, message, senate, character, marriage, Wednesday, fountain, minute* (noun), *biscuit, greatest, knowledge, profit, prophet, loveth, declare, example, furnace, Mrs., mistress, resist, prepare, lettuce, foreign, coffee.*

256. At an earlier period of the language, the vowels in the unaccented syllables of these words were sounded much more distinctly than today, and corresponded more nearly to the stressed sound suggested by the spelling in each instance. Most of them were high-front or mid-front vowels, and when, in process of time, they came to be pronounced less distinctly, they came to resemble the ɪ of *bit*. Observe that in some of these words this unstressed ɪ can be changed by deliberate pronunciation to its original distinct vowel without too great artificiality; as in *prepare* **pripæɚ**, *besides* **bisaɪdz**, *declare* **diklæɚ**. But in most of the words the earlier sound cannot now be restored without

[83] *Dictionary of English Pronunciation with American Variants.* See *Bibliog.*

an unnatural effect; as in *message, Wednesday, fountain,* which would sound affected if pronounced **mɛsedʒ, wɛnzde, faunten.**

257. In the first syllable of words like *employ, engage, essential, exact, expect,* etc., British usage differs slightly from American, which often has **ɛngedʒ, ɛkspɛkt, ɛgzækt,** etc., where British has **ɪngedʒ, ɪkspɛkt, ɪgzækt,** etc. In rapid colloquial speech, however, the American sound in these words approaches **ɪ.**

258. *Effect* and *affect* are often both pronounced **əfɛkt.** When they are distinguished, *effect* is **ɛfɛkt** or **ɪfɛkt,** and *affect* is **əfɛkt.** When *except* and *accept* are, as often, pronounced alike, they are either **ɪksɛpt** or **əksɛpt,** but are frequently distinguished as **ɛksɛpt, ɪksɛpt** and **əksɛpt, æksɛpt.**

In words ending in *-ile,* such as *agile, docile, fertile, fragile, hostile, juvenile, servile, tactile, textile, virile,* American usage prefers **ɪl** while British prefers **aɪl.** See Webster, *Pron.* §155.

259. Unaccented **ɪ** before a vowel shows a tendency to become **j** (as in *Indian;* see §195 (3, **a**)). Transcribe and compare the following: *audience, behavior, bilious, colloquial, convenient, familiar, genius, glorious, industrious, Italian, junior, Northumbrian, pedestrian, radiance, serious, terrestrial.* In which is it difficult to pronounce **j**? Why? Cf. §348(3).

e

260. (1) Repeat the descriptive name of **e.**

(2) Comment on the sound and its spelling in *aim, age, base, bass, say, they, vein, break, gauge, gaol, chaotic, fatality, vacation.*

261. The sound **e** has become a diphthong in some dialects. It is much more diphthongal in standard Southern British than elsewhere, a common form there being **ɛɪ,** though the simple vowel is not unknown there (see §34). But in America the second element of the diphthong **eɪ** is less marked, and the vowel is not infrequently simple **e.** When it is a diphthong the

first element is usually **e** rather than **ɛ**. **eɪ** is more frequent when final (*day* **deɪ**) or before a voiced consonant (*dale* **deɪl**). The diphthong, however, is not uncommon in America, even before voiceless consonants (*date* **deɪt**). The more marked diphthongal quality when final or before voiced consonants is due to its greater length in those positions, and illustrates the greater tendency of English long vowels to break up into diphthongs. The same process has been completed in the two ME long vowels **iː** and **uː**, which have now become the full diphthongs **aɪ** and **aʊ**, while the ME short **ɪ** and **ʊ** have remained simple vowels **ɪ** and **ʌ**. The lengthening and diphthonging of several formerly short vowels is a marked tendency in present American English, especially Southern.

262. The same statements about the simple **e** and the diphthongs **eɪ, ɛɪ** apply to the **o** sound in America and England. **o** is diphthongized to **oʊ** (with variation of the first element) in America and England under the same conditions as **e**. The farther north we go in England, the less diphthongal **e** and **o** become.[84] In standard English of Scotland **e** and **o** are still not at all diphthongal, in this respect resembling continental **e** and **o**.

263. According to the phonemic principle it is not necessary in phonetic transcription to spell the diphthongs **eɪ** and **oʊ** with two symbols, as in *may, made*, for in both British and American English the vowels **e, eɪ, eɪ, ɛɪ** all belong to the same phoneme. The substitution of any one of them for another will not change any English word to another word. See §34.[85]

[84] This similarity of American and Northern British does not indicate that American was derived from Northern British, as is often assumed, but merely that both types of English represent older and more conservative forms of English, preserving what Southern British had been in the past. In the degree of diphthongization of **e** and **o**, American pronunciation is today about what Southern British was in 1800–50.

[85] It may be noted, however, that in Southern British **ɛ** and **ɛɪ** belong to separate phonemes, as in *met* **mɛt**, *mate* **mɛɪt**.

264. In England and America *Monday* is **mʌndɪ**,[86] and so with the other days of the week. In America *holiday* is **ˈhɑləˌde** while in England both **hɒlɪdɪ** and **hɒlɪde** are found. Conversely, **ɔlwɪz** is general in America, while **ɔlweɪz** is frequent in England, though **ɔlwɪz, -wəz** is also common there.

265. Remembering that in southern England the vowel in *hate* is **ɛɪ**, note the result, in sounding the first element of this diphthong, of gradually lowering and retracting the tongue from **ɛ** to **æ, a, ɑ**, thus producing **æɪ, aɪ, ɑɪ.** In the vulgar dialect of London, or "Cockney" English, *day* is pronounced with **æɪ, aɪ, ɑɪ**, so as to sound to an American like *die*. The Cockney does not, however, confuse *day* with *die*, for he also retracts the tongue for the first element of **ɑɪ** in *die*, till it becomes **ɒɪ** or even **ɔɪ.**

266. When the sound **e** loses its accent, it is regularly reduced to **ɪ**, as in *daily* **ˈdelɪ**—*Monday* **ˈmʌndɪ** (see *Gradation*, under **e**, p. 91). Instances like **ˈstebl̩**—**stəˈbɪlətɪ** represent an earlier reduction of the shortened vowel (see the remark on **mænlɪ**—**postmən** in §131). Note also that after **e** has become **ɪ**, as in *Saint* **sent**—*Sinclair* **sɪnˈklæɚ**, it may be further obscured to **ə** or disappear, as in **sənˈklæɚ, sn̩ˈklæɚ.** See §§131 and 137 (*Saint*).

This reduction of **e** to **ɪ** is seen in such endings as *-ace* (*palace* **pælɪs**), *-age* (*message* **mɛsɪdʒ**), *-ate* (*senate* **sɛnɪt**). Cf. also *orange* **ɔɚɪndʒ**, *Highgate* (London) **haɪgɪt.** This accounts for the pronunciations **kærɪktɚ, ɑbstɪkl̩, mɪɚɪkl̩, spɛktɪkl̩, rɪˈsɛptɪkl̩,** which still have **ɪ** beside **ə** (**kærəktɚ**, etc.). Cf. Chaucer's forms **mɪˈrɑːklə, ɒbˈstɑːklə**, etc., with long **ɑː.**

267. A large class of words with final **ə** in cultivated pronunciation, such as *soda, sofa, cholera, opera, America, Martha,*

[86] As it has been for at least three hundred years. Walker recommends it in 1791 (Webster *Pron.* §89) and Wyld records the spellings *Fridy*, 1642, and *Mundy*, 1647.

Ella, Sarah, Utica, and many other personal or place names ending in *-a* or *-ah,* are pronounced in the vulgar idiom with final **ɪ, sodɪ, mɑəˑθɪ, jʉtɪkɪ,** etc. The cause of this is not quite certain. It seems most likely that **ɪ** goes back to an earlier pronunciation of *a* as **e,** which naturally becomes **ɪ** when unstressed. This is Jespersen's explanation of nonfinal **ɪ** in unstressed syllables spelt with *a,* as in *message* **mɛsɪdʒ,** *senate* **sɛnɪt.** But there is evidence that final *a* was sometimes so pronounced; e.g., Peele (16th c.) rimes *day:Ida;* the quarto of Shakespeare's *Much Ado* has *Ursley* for *Ursula* of the folios; Gill (1621) has *mopseys* for *Mopsas;* Pope rimes *conveys:operas;* and Professor Grandgent calls my attention to the current popular pronunciations *Nashua* **næʃəwe,** *Iowa* **aɪəwe,** *Mantua* **mæntəwe.** See Jespersen, *Grammar,* I, §§9.14 ff.

A reverse result has come from such pronunciations as **mɑəˑθɪ** for **mɑəˑθə, əmɛəˑɪkɪ** for **əmɛəˑɪkə,** etc. Many people brought up on these pronunciations with **ɪ** who have later adopted the cultivated pronunciation with **ə,** have mistakenly applied the same correction to words like *Missouri, Cincinnati, prairie,* which properly end in **ɪ,** and so have made them **məˈzʊəˑə, sɪnsəˈnætə, pəˈrɛəˑə.**[87]

ɛ

268. (1) Repeat the descriptive name of **ɛ.**

(2) Comment on the sound and its spelling in *met, breath, breakfast, leopard, Leicester, friend, said, says, saith, any, many, Thames* (§§145, 157), *bury, again, Pall Mall.*

269. (1) The spelling *ea* is found in many words now pronounced with **ɛ,** as in *bread, dead, death, dread, head, spread, thread, threat, tread.* In these and others the spelling *ea* indicates an Early Modern pronunciation with long **eː,** which became

[87] See Allen W. Read, "Pronunciation of the Word 'Missouri'," *American Speech,* Dec., 1933, pp. 22–36, and R. J. Menner, *Am. Sp.,* Oct., 1937, p. 171.

shortened to ɛ. In others the same vowel **eɪ** remained long and regularly changed (by the Great Vowel Shift, §10) to present-day **i**, as *bead, heat, knead, meat, seat, wheat.* For a time some words wavered in usage between the long and the short vowel. This is seen in the word *deaf* **dɛf**, for which the pronunciation **dif** has only recently become substandard. Cf. also *to lead* and *lead* (metal). *Breakfast* now merely imitates the spelling of *break;* the vowel was already shortened to ɛ in ME (note the spelling *breckfast* in 1594). The past tense *read* **rɛd** shows reverse spelling (§§154 (2)); the ME form was *redde* **rɛd-də**, and should now be spelt *red* (like *led*).

(2) The past tense of the verb *to eat* is pronounced **et, ɛt,** and **it.** The last, recognized by the *Oxford* (1897) and *Shorter Oxford* (1933), is generally regarded as dialectal in America. The pronunciation **ɛt** is now substandard in America, though very common in native dialect. **ɛt** is the prevailing form in Southern British, though **et** is also common.

Wyld (*Universal Dictionary*) lists the spelling *ate* with the pronunciation **et,** and the spelling *eat* with the pronunciation **ɛt.** Historically, he is of course right (cf. *threat,* etc., above). Under *ate* **eɪt** he says: "This form is obsolescent and rarely used, the normal past tense being *eat* **ɛt.**" This is perhaps true of the word itself in Southern British, but hardly true of the spelling. It is one of many instances in English of a pronunciation that has got associated with a spelling that belongs to another pronunciation, as **bɪzɪ** has become associated with the spelling *busy,* which belongs to an obsolete pronunciation (see (4) below). There is little hope that usage will follow Wyld's spellings. The convenience of a written and printed form *ate* for the past tense different from the present *eat,* together with the widespread currency of the pronunciation **et,** will probably preserve the spelling *ate.* It should be noted that the pronunciation **et** is not

a spelling-pronunciation, though the spelling *ate* may have helped to preserve this historical pronunciation.

(3) What is the difference of meaning in **klɛnlɪ** and **klinlɪ?** See §250 (4).

(4) The word **ɛnɪ** (ME *eni* **ɛnɪ**) has the spelling *any* of the obsolete form (ME *ani* **ɑnɪ**). Similarly **mɛnɪ** (of doubtful origin) is spelt *many* from the obsolete form **mɑnɪ** (ME *mani* **mɑnɪ**), which is preserved in *manifold* **mænəfold.** Cf. **bɪzɪ** above.

æ

270. (1) Repeat the descriptive name of **æ.**

The sound **æ,** commonly known as "short *a*," and also called "flat *a*," is the most frequent accented sound spelt with the letter *a* in both British and American standard speech,[88] as **ə** is its most frequent unaccented sound (sof*a*). **æ** is the regular descendant of ME short **ɑ** (spelt *a*), when not influenced by neighboring sounds. It appears in the common English words *back, cat, saddle, shallow, fan, man, hand, drank,* etc. For its sound in words like *carry, marry, tarry,* see **æə̯,** §360.

ɑ

271. (1) Repeat the descriptive name of **ɑ.**

(2) Comment on the sound and its spelling in *father, part, calm, stop, odd, pocket, wash, want, swallow, quality, was, drama, possibility.*

272. As seen in the foregoing examples, the sound **ɑ** in America has three principal spellings: (1) *a* (*father*), (2) *o* (*stop*), and (3) *wa* (*watch*). A few spelt with *a* descend from ME *a* **ɑ;**

[88] See *American Speech,* April, 1930, pp. 323 ff., and Charles H. Voelker, *Le Maître Phonétique,* Juil.–Sept., 1934, pp. 73 f. In Voelker's list the larger figure for **ɑ** than **æ** in America is due to the inclusion of words spelt with *o* ("short *o*").

those with *o* from ME *o* **ɒ**; and those with *wa* from ME *wa* **wɑ.**

In British English two groups are now distinct: (1) the *a* **ɑ** group (*father*), and (2) the *o* **ɒ** group (*stop, watch*), group (3) having shifted, under the influence of the lip-rounded **w,** from the ME **ɑ** group (1) to the **ɒ** group (2). In General American all the groups have fallen together into one with the sound **ɑ; fɑðɚ, stɑp, wɑtʃ.**[89] For greater simplicity, the **ɑ** words with the spelling *a* will be treated here, and the **ɑ** words with the spelling *o* and *wa* will be treated in §§286–291.[90]

273. To understand several related sounds now spelt *a*, it is necessary to consider a few historical facts.

(1) ME had a long **ɑː** sound and a short **ɑ** sound. The long ME **ɑː** (**mɑːkə**) became present English **e** (*make* **mek**), and will not concern us further here (§260).

(2) The **short** ME **ɑ** (**mɑn**) is the source of all the different *a* sounds that will concern us here.

(3) This short ME **ɑ,** some time before 1600, by the advancing of the tongue became **æ** (see Figure 9, p. 66). It has remained **æ** in standard British and American English in the great majority of words with ME short **ɑ** (*cat, saddle, man, hand*, etc. See **æ,** §270). These are the "short *a*" words mentioned at **æ** (§270).

(4) As a consequence, Early Modern and Late Modern standard speech up to about 1775 had no **ɑ** sound in the words under consideration, including such words as *father, calm, hardly*, and such words as *ask, staff, bath, jaunt, aunt, half*, etc., which now have **ɑ** in some types of English. Sheridan's pronouncing

[89] The principal variations from this in America will be further treated under **ɒ,** §288 and **ɔ,** §291. The change (chiefly unrounding) of **ɒ** to **ɑ** did not first take place in America, but in standard British in Early Modern times. British afterwards changed again to the **ɒ** sound in *stop, watch*, etc.

[90] For words like *Clark, sergeant*, see **ɑɚ** (§365).

dictionary (London, 1780) shows no **ɑ**. Benjamin Franklin's phonetic transcriptions in 1768 have none. His pronunciation of *father, hardly* was **fæðr, hærdlɪ.**[91] Noah Webster in 1789 has **æː** in *aunt, jaunt, sauce.*[92] E. Hale in 1799 has **æ** in *aft, balm, carve, gaunt,* etc.[93]

The older sound **æ** where we now have **ɑ** is frequently shown in 17th and 18th c. rimes; as *prayer:afar* (**præːr:əfæːr**—Johnson), *searches:arches* (**sæːrtʃɪz:æːrtʃɪz**—Swift), *was:brass* (**wæs:bræs**—Spenser), *was:glass* (**wæs:glæs**—Sackville), *was:ass* (**wæs:æs**—Shakespeare). It is also evidenced in present-day dialect pronunciations preserving an older stage of the language; as in **gænt** for *gaunt*, **gæntlɪt** for *gauntlet*, **fæðɚ** for *father*, **pæpɪ** for *papa*, **mæmɪ** for *mamma*, **pætrɪdʒ, kætrɪdʒ** for *partridge, cartridge* (with early loss of **r**), **sæm** for *psalm*, **kæm** for *calm*, **sæs, sæsɪ** for *sauce, saucy*, etc.

274. In certain groups of originally "short *a*" words that had **æ** in the 17th and 18th cc., the **æ** sound was retracted again to **ɑ**.[94] Three groups are concerned:

I. Words in which the *a* was followed by *r* final or+a consonant, as *bar, far, part, hardly*. In these GA now has the diphthong **ɑɚ** (**bɑɚ, pɑɚt, hɑɚdlɪ**) and Eastern and Southern American

[91] *Scheme for a New Alphabet and a Reformed Mode of Spelling.*

[92] *Dissertation on the English Language,* Boston. Webster's first dictionary was published in 1806.

[93] *A Spelling Book,* Northampton, Mass.—See C. H. Grandgent, "From Franklin to Lowell," *Pub. Mod. Lang. Assoc. of America,* XIV. 2. 207 ff. (1899).

[94] The length of the **æ** and **ɑ** is here disregarded to simplify the account, although it was an important factor in the change. Only the quality of the sound is here considered. The **æ** before *r, lm,* and the fricatives **f, θ, s** was first lengthened to **æː** in the 17th c. and afterwards retracted to **ɑː**. It is uncertain whether the varying length of **æ** in present GA in these words is an inheritance from 17th c. British, or is an independent development. The length is not now distinctive in America, but only quality.

and Southern British have **ɑː**, as **bɑːˌ pɑːt, hɑːdlɪ.** (But if *r* was followed by a vowel, æ remained: GA *carry* **kæɚɪ**, *marry* **mæɚɪ**; British **kærɪ, mærɪ.**)

II. Words in which the *a* was followed by *lm* = **m**, as *balm, calm, psalm, almond.* These now have **ɑ** in both British and American: **bɑːm, kɑːm, sɑːm, ɑmənd.**

III. Words in which the *a* was followed by (1) a voiceless fricative (except **ʃ**) **f** (*staff*), **θ** (*path*), **s** (*ask*); by (2) **m** or **n**+ a consonant (*example, demand, chance, aunt, branch*). All these words will hereafter be referred to briefly as the "*ask*" words. The change from **æ** to **ɑ** in these words was, however, incomplete in two respects: (**a**) It has not occurred at all in General or Southern American (except the vicinity of Richmond), but only in British (chiefly Southern) and Eastern American (with Richmond). (**b**) With many speakers the sound has only reached the stage **a**, intermediate between **æ** and **ɑ.**

275. There are somewhat over 150 of these words, including derivatives from the main words (as *crafty* from *craft*). Following is a list of the most common words in Group III, in which Southern British regularly has **ɑ** and Eastern American **ɑ** or **a.**

(1) **f**—*aft, after, behalf, calf, chaff, craft, daft, draft, draught, graft, half, laugh, raft, rafter, shaft, staff, waft.*

(2) **θ**—*bath, lath, path, wrath* (Brit. **rɔθ**).

(3) **s**—*aghast, ask, asp, bask, basket, blast, brass, cask, casket, cast, caste, castle, caster, castor, clasp, class, disaster, fast, fasten, flask, gasp, ghastly, glass, grasp, grass, last, mask, mast, master, nasty, pass, past, pastime, pastor, plaster, rascal, rasp, raspberry, repast, task, vast.*

(4) **m**—*example, sample.*

(5) **n**—*advance, advantage, answer, aunt, blanch, Blanche, branch, can't, chance, chant, enchant; command, countermand, demand, remand, reprimand; dance, France, Frances, Francis, glance, grant, lance, plant, prance, shan't, slant, stanch, trance.*

To these must be added (1) derivatives from the main words (*crafty* from *craft*, *dancer*, *dancing* from *dance*, etc.); and (2) a number of plural nouns and verbs such as *halves*, *to halve*, *paths* (**-ðz**), in which the fricative is voiced and would not normally cause the change from æ to **ɑ**. These words take **ɑ** by analogy of words like *half*, *path*, etc.

276. In these words toward the end of the 18th c. in South England the æ sound before **f, θ, s,** and nasals was retracted to **ɑ,** so that in Group III **ɑ** is now the prevailing sound. In GA, however, which was in the main derived from 17th c. standard British (see §5), this change did not take place. So all the words of Group III normally have æ in GA. The same is true of the South (with the exception of Richmond and vicinity), and of most of Canada. In Eastern New England and New York City either **ɑ** or **a** is usual in the words (excepting, of course, the large portion of New York City population that derive their speech from Western or foreign sources).

277. The change of **ɑ** was not, however, so complete as thus far indicated. Many words with the same sounds following the *a* either waver between æ and **ɑ** or are pronounced with æ exclusively; in general, but not altogether, the less popular words, especially more recent foreign loan-words. A few examples among many are: *alabaster*, *ample*, *askance*, *asp*, *aspect*, *bass*, *cant*, *champion*, *classic*, *contrast*, *crass*, *expand*, *expanse*, *fancy*, *finance*, *franchise*, *grand*, *haft*, *hand*, *hasp*, *land*, *lass*, *mass*, *Mass*, *massive*, *mastiff*, *pant*, *passive*, *passage*, *passenger*, *pastern*, *plastic*, *rant*, *romance*, *sand*, *sang*, *sank*, *scant*, *stand*, *telegraph*, *trans-*.

278. No purely phonetic development will account for usage in all the words so far given and others similar to them. The element of fashion undoubtedly has played a part. Certain words have thus ranged themselves with these which are phonetically alien to the group. The word *father* is the most striking of these, with the **ɑ** sound now universal in all types of standard

English. The reason for ɑ in *father* has never been explained with entire certainty.[95] *Rather* is in England now usually rɑðə(r), but GA still has ræðɚ, rɑðɚ being an importation. In England *lather* has started on the same road (*Oxford*, Baker, Wyld, æ, Jones ɑ, æ). Perhaps gɑðɚ will come next.

279. In South England at the end of the 18th c. the ɑ sound in these words was looked upon as vulgar, possibly because the change from æ to ɑ first took place among the lower classes. Walker (c. 1800) objects to the ɑ sound in *last*, *past*, *chance*, etc., on the ground that it is used by the vulgar. He also objects to any intermediate sound as a compromise between æ and ɑ; apparently such a sound (a) was then heard, possibly from the Scottish and Northerners in London.[96]

280. In 1830 Worcester, the American lexicographer, recommends an intermediate sound (a) in words like *fast*, *last*, *glass*, *grass*, *dance*, etc., to avoid the affectation of æ and the vulgarism of ɑ.[97] Smart, the elegant British lexicographer and teacher of princes followed him with the same advice and for the same reason in 1838.[97a] Since then the same advice has been repeated

[95] See in particular, Kemp Malone, The *A* of *Father*, *Rather*, *Modern Philology*, May, 1918, pp. 11–22. Luick, *Gram.* I, 2, §§494, 537, 559, 1a, 560. Luick's view that ɑ is due to r in the following syllable (cf. Group I) hardly agrees with *gather*, *lather*, *Mather*, and the GA pronunciation of *rather* ræðɚ. Whatever the origin of ɑ in *father*, it seems likely that the Church service helped to make it universal.

[96] There was great diversity of usage in these words in London about this time, and probably much earlier. The situation was complicated by the large number of Scottish and Northerners in London for whom the change from æ to ɑ had not taken place, but whose æ sound in all "short *a*" words as well as these had probably reached (or preserved) the stage a which it has at present. If we may believe Walker, the ɑ sound had come into vogue before 1790 and given way again to the vogue of æ (to be replaced again by ɑ). Walker may merely have been calling ɑ old-fashioned to discredit it.

[97] Grandgent, *Pub. Mod. Lang. Assoc.*, 1899, p. 215.

[97a] Storm, *Englische Philologie*, I, pp. 374 f.

for the opposite reason—to avoid the vulgar æ and the over-refined ɑ.

281. The present status of **a** in these words is indicated by the following: Daniel Jones: "In the South of England the use of **a** in these words is rare, and it seems that those who use it do so in a few words only. The pronunciation with **a** can hardly be considered as Received Pronunciation."[98] The *Oxford* recognizes for England as a whole the existence of various shades of vowel between æ and ɑ. "The vowel in *pass*, *command*, variously identified by different speakers with *a* in m*a*n, and *a* in f*a*ther, is symbolized by the avowedly ambiguous ɑ."[99] In 1899 Grandgent says: "This compromise vowel, which was recommended also in England, does not seem to have been adopted, in actual speech, by any considerable number of Americans; it may be heard, however, on Cape Cod."[1] It is the author's opinion that this sound is somewhat more prevalent in parts of New England than Grandgent thought it to be at that time. But pending the appearance of the New England material in the *Linguistic Atlas of the United States and Canada*, we lack definite information as to how far the sound **a** is standard in Eastern America, and how far it is to be regarded as a New England localism.

282. Not as a consequence of the artificial attempts to establish the intermediate **a**, but by normal dialectal development, the **a** sound (varying toward either æ or ɑ) not only in the "*ask*" words, but in all "short *a*" words, is regular in the cultivated English pronunciation of Northern Englishmen and Scotsmen, and also in the northern and various other local British dialects.[2] This sound in the same "*ask*" and "short *a*" words is also found

[98] *Phonetics*, 3d ed., 1932, p. 75.

[99] Vol. I, p. xxiv.

[1] *Loc. cit.*, p. 215.

[2] Lloyd, *Northern English*, §90; Grant, *The Pronunciation of English in Scotland*, §143.

locally in various parts of America, where it is usually attributable to Scotch influence (as in Alberta, Canada).

283. In General and Southern American the **a** sound has no general currency. In Richmond and vicinity **ɑ** is current in the "*ask*" words, while in the rest of the South, in General American, and in most of Canada **æ** is the universal sound in both groups of words. The **æ** is somewhat "flatter" (higher) in the South than in the rest of the country, in this respect resembling Southern British **æ**. It is usually longer than the British, and tends to be diphthongal.[3]

284. The pronunciation of "*ask*" words either with **a** or **ɑ** has been a favorite field for schoolmastering and elocutionary quackery. The practitioners seldom succeed in compassing more than a half-dozen words (*ask*, *half*, *aunt*, *laugh*, etc.). As a result of their efforts some individual speakers of GA now have an occasional pronunciation **ask, ɑnt, hɑf, rɑðɚ.**

A more serious result is the tendency among many aspirants to the "broad *a*" to apply it to words which are not pronounced **a** or **ɑ** in any type of standard English except Northern British and Scottish (where the practice is consistent and unaffected). Thus they favor us with **man, hapɪ, fɑnsɪ, romɑns, pasɪdʒ, trafɪk, maθəmatɪks, gaðɚ, ɑmpl, frɑntʃaɪz, pɑnt,** etc.[4a]

285. Those who maintain that the **ɑ** sound is intrinsically more beautiful than **æ**, not only forget that this argument exactly reverses that of the early objectors to **æ**, but that Southern British, which they usually hold up as a model because of its **ɑ** sounds, has far more **æ** sounds than **ɑ** sounds.[4] Moreover,

[3] In this condensed statement, no account has been taken of the historical difference between words like *ask*, *path*, *staff*, and words like *half*, *laugh*, *aunt*. For these are now identical in Southern British (with **ɑ**), and also in General and Southern American (with **æ**). In New England they are often identified (with **a**) and always by those who use **ɑ** instead of **a** in "*ask*" words. But in Northern British and in Scotland a distinction is often made (**staf** but **lɑf**, etc.).

[4] See footnote 88, p. 171.

[4a] All recorded from radio.

GA has more ɑ sounds than Southern British, owing to the prevalence in GA of the ɑ sound in words that have "short *o*" in British.[5] To such theorists, however, an ɑ sound spelt *o* is not so beautiful, even if long, as one spelt *a*. They also seem to forget that many generations of our ancestors managed fairly well with æ in the words in question,

> "and yet thei spake hem so,
> And spedde as wel in love as men now do."[6]

ɒ

286. (1) Repeat the descriptive name of ɒ.

(2) Comment on the vowel you use in *doll, holiday, hot, pod, pond, on, was, swap, from, watch, what, wander, want, wash, wasp, quality, swallow.*

287. As pointed out in §272, n. 89, the ME short *o* ɒ sound changed in 17th c. British to an ɑ sound. It is likely that this is the chief source of the ɑ sound that is spelt *o* in America today. Its length varies greatly, and depends chiefly on sense-stress, emphasis, and neighboring sounds; hence, as usual, its length is not distinctive.

288. The status of ɒ in America is hard to describe, for it is not fully known. The ɒ sound is regularly and naturally used by many New Englanders and some Southerners, who make consistent distinction between the vowels of *father* and *fodder*. Some New Englanders make the distinction by using ɑ for "short *o*," while using for *father*, etc., an advanced ɑ which is nearly or quite **a**. Thus the distance between the two vowels is preserved.

[5] The author's findings in this matter are fully confirmed by Voelker's independent investigation, by which he found for formal spoken American 27,457 (4.15%) ɑ sounds as against 20,417 (3.09%) æ sounds. Cf. *Le Maître Phonétique*, Juil.–Sept. 1934, p. 74.

[6] I acknowledge the kind permission of the G. and C. Merriam Co. to include in §§274–84, 291 a few details not in the fifth edition of this book, which were contributed to Webster's *New International Dictionary, Second Edition.*

The ɒ sound, or at any rate a sound intermediate between ɑ and ɔ, is used sporadically by many individuals in GA territory, especially in words with **w** (*want*) and with *r* (*sorry*). But it cannot be considered a stable and well-recognized phoneme in GA.

Organically and acoustically American ɑ and ɔ are closer together than present Southern British ɑ and ɔ, British ɑ being a trifle nearer to **a** and ɔ nearer to **oː**.[7] Hence in America ɒ is less distinct from either ɑ or ɔ than in England. Whether the change took place on British or American soil, the ɒ sound in America has in a part of the words spelt *o* fallen together with ɑ (*top*) and in other words with ɔ (*song*). These variations will be more fully illustrated under ɔ below.

The chief factor in the change of ɒ to ɑ is unrounding of the lips, the tongue positions of the two sounds (both low-back) being near together. Americans who do not naturally pronounce ɒ are often able to acquire an acceptable ɒ by rounding the lips and aiming at ɑ. See further under ɔ, §291.

ɔ

289. (1) Repeat the descriptive name of ɔ.

(2) Comment on the sound and its spelling in *awful*, *cloth*, *broad* (cf. *road*), *ought*, *aught*, *nought*, *taught*, *talk*, *quart*, *wall*, *war*, *augment*, *inauspicious*, *Utah*, *Washita*, *Wichita*, *Omaha*, *water*.

(3) Many American speakers pronounce in place of ɔ an unrounded vowel that resembles ɑ or ɒ. This can usually be corrected by being careful to round the lips decidedly in pronouncing words like *law*, *all* (see Figure 8, p. 62).

(4) British speakers often change ɔ to ɒ before **l** or **s**+a consonant (*always* **ɒlwɪz**, *also*, *fault*, *although* **ɒlˈðo**, *alter*, *Austen* **ˈɒstɪn**, *Austria*, *Aus*ˈ*tralia*, *au*ˈ*spicious*).

[7] In London local dialect it has reached **oː**.

(5) Southern British ɔ is decidedly more o-like than American.

290. Two common ways of spelling ɔ, *au* (*aw*) as in *caught* (*saw*), and *ou* as in *bought*, are due to the fact that formerly *au* (*aw*) and *ou* were pronounced **ɑu** and **ɒu** in accord with the spelling. These two diphthongs afterwards changed to the simple sound ɔ, but the old digraph spelling was kept. The same sound-change is disguised in *talk*, *all*, in which **ɑl** had produced a diphthong **ɑu**, formerly sometimes spelt *au*, but now usually *al*. This diphthong changed to ɔ in the same way as other **ɑu** sounds did. See "dark" **l**, §§221 f.

291. In certain groups of words cultivated American usage varies among the sounds **ɑ, ɒ, ɔ**. It should be noted that in all the groups the words spelt *wa* are treated like those spelt with "short *o*." See §272.

(1) Words like *foreign*, *horrid*, *laurel*, *tomorrow*, *orange*, *origin*, *sorrow*, *sorry; warrant*, *warrior*, *Warren*, *quarrel*, *quarry*, *quarantine*. In these words the vowel is followed by an *r* sound, spelt *r*, *rr*, and another vowel. In GA the main vowel and the *r* sound form a centering diphthong, which is treated here for comparison of its first element with the other **ɑ, ɒ, ɔ** sounds (see §352). In these words the prevailing GA natural pronunciation is with **ɔə˞; fɔə˞ɪn, hɔə˞ɪd, lɔə˞əl, təmɔə˞o, ɔə˞ɪndʒ, ɔə˞ɪdʒɪn (ɔə˞ədʒɪn), sɔə˞o, sɔə˞ɪ; wɔə˞ənt, wɔə˞ɪ-ə˞, wɔə˞ɪn, kwɔə˞əl, kwɔə˞ɪ, kwɔə˞əntin.** It must be carefully noted that the American ɔ sound is not so near to **o** as British ɔ is, which would sound dialectal in these words. Moreover, many Americans whose ɔ in *all*, *law* is but slightly rounded pronounce a sound in *sorry*, *orange*, etc., which is acoustically not far from **ɒ**. Many speakers of GA use **ɒ** in these words, the *r* sound having assisted to preserve the rounding of the preceding vowel in America.[8] The sound **ɑ** is

[8] The frequent rounding of **ɜ** in *hurt* and the rounding of **r** itself is recognized both by Grandgent (*loc. cit.*, p. 221), and by William A. Read (*Jour. Eng. and*

also sometimes heard in some of the words (**sɑɚɪ, hɑɚ-ɚ**), but this is probably, in part at least, due to a reaction against the use of **ɔ** and the advice of teachers to use a "short *o*" to those who have no **ɒ** in their speech. This pronunciation is much less common, I believe, than **ɔɚ**.

This group must be distinguished from the words in which the *r* sound is final or followed by a consonant, as in *for* **fɔɚ**, *form* **fɔɚm**, *war* **wɔɚ**, *warm* **wɔɚm**, *quart* **kwɔɚt**. These words have the **ɔ** sound (GA **ɔɚ**, British **ɔ**) in all types of standard English. See **ɔɚ**, §366.

(2) Words in which the vowel is followed by a voiceless fricative (except **ʃ**) (**a**) **f**: *coffee, coffin, cough, doff, loft, off, offer, office, often, scoff, soft,* (**b**) **θ**: *broth, cloth, froth, moth, troth, swath;* (**c**) **s**: *boss, Boston, cost, cross, frost, gloss, loss, lost, moss, Ross.* It will be noted that in these the vowel is followed by the same voiceless fricatives as the "*ask*" words. A parallel historical fact lies behind them. As **æ** was changed before these fricatives in South England and parts of New England to **ɑ**, so an earlier **ɒ** was changed to **ɔ**. The geographical distribution is, however, different. Northern British still has the **ɒ** sound in these words. Southern British still has **ɔ** in many of them but the tendency in South England is now toward **ɒ** (for details, see Webster, *Pron.* §185). In GA **ɔ** still prevails except in some of the plurisyllables (*possible, profit, Gothic,* etc.). But some of these have **ɔ** in GA, as *office, offer, officer, Boston, coffee.* The efforts to change **bɔstn̩** and **kɔfɪ** to **bɑstn̩** and **kɑfɪ** have produced little result in America as a whole. A considerable number of persons with phonetic training have begun to use **ɒ** in most of these words, and as in Group (1) many speakers with unrounded **ɔ** in *law,* pronounce a vowel that resembles **ɒ** in these words.

(3) Words like *splosh, squash, swash, wash,* with **ʃ** after the

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Germanic Philol., April, 1923, p. 235), who mentions its influence in preserving **ɒ** from becoming **ɑ** in this class of words.

vowel. There are not many of these. These regularly have **ɑ** except as they contain **w**. This frequently has the effect of rounding the vowel to **ɒ** or **ɔ**. This is especially common in *wash*, and is found also in British cultivated speech. See below (9).

(4) Words with the affricates after the vowel, as *botch, blotch, crotch, notch, Scotch, splotch, watch; dodge, Hodge, hodge-podge, lodge, stodgy*. These all have **ɑ** except as **ɒ** or **ɔ** occasionally occurs in *watch* (see (9) below).

(5) Words with **l** after the vowel, as *doll, loll, Poll, folly, golly, holly, jolly, Molly, volley, follow, hollow, swallow, wallet*. These have **ɑ** except for the usual variation in the **w** words.

(6) Words with **ŋ** after the vowel, as *gong, long, prong, song, strong, thong, throng, tongs, wrong*. In these GA regularly has **ɔ**, differing definitely from British, which has **ɒ**. As an acquired pronunciation **ɒ** occurs occasionally, and also with those who have **ɒ** regularly in other words. But the preponderance is clear for **ɔ**. Grandgent believed that **ɔ** prevailed in New England in 1899.[9]

(7) *Gone* is irregular in its history (it would normally rime with *stone*). In GA it is generally **gɔn** (so New England in 1899[10]). In England it varies between **ɒ** and **ɔ** (Jones **ɒ, ɔ**; Wyld **ɔ, ɒ**; Baker **ɔ, ɒ**; *Oxford* both without choice). *Shone* is regularly **ʃon** in GA, the British **ʃɔn, ʃɒn** not being current here. But other words with nasals regularly have **ɑ**, as *from, Tom, non-, prompt, swan, swamp, wander, want*, except as usual the **w** words and occasionally *on*, with **ɒ** or **ɔ**. On the Western Reserve, **swɔmp** is common, and **wɔnt** is widespread beside **wɒnt** and **wɑnt** (**wɔnt** is also heard in England—Baker).

(8) Words with stops after the vowel. These are numerous: *bob, cob, cobble, fob, gob, gobble, hob, hobble, job, knob, mob, rob, robber, sob, snob, squab, swab, throb, wobble*.

[9] *Loc. cit.*, p. 220.

[10] *Loc. cit.*, p. 220.

chop, cop, crop, drop, flop, fop, hop, lop, mop, pop, prop, shop, slop, sop, stop, strop, swap, top.

clod, cod, fodder, God, hod, nod, plod, pod, prod, quad, rod, shod, sod, squad, tod, trod, wad, waddle.

blot, bot, clot, cot, dot, got, grot, hot, jot, knot, lot, not, plot, pot, rot, Scot, shot, slot, sot, spot, squat, swat, tot, trot, watt, what.

bog, clog, cog, dog, fog, frog, goggles, grog, hog, jog, log, nog, tog.

block, clock, cock, crock, dock, flock, frock, hock, Jock, knock, lock, mock, mockingbird, rock, shock, smock, sock, stock.

These words and many derivatives from them, or plurisyllables with the same vowel, regularly have **ɑ** in GA, with the usual New England variant **ɒ**. There is, however, a good deal of variation between **ɑ** and **ɔ** in the *-g* words. *Dog* is universally **dɔg** in natural pronunciation (including New England[11]). The spelling *dawg*, used to ridicule a supposed mispronunciation, has led some timid speakers to use **dɑg** occasionally, but it is not general. **lɔg** is also usual within the author's observation. **fɔg, frɔg, hɔg** are frequent variants of **fɑg, frɑg, hɑg. mɔk,** and especially **mɔkɪŋbɜ̝d,** are not infrequent. **gɔd** is looked upon either as dialectal or overpious, but **gɒd** is not uncommon.

(9) Owing to the influence of the rounded **w,** the **w** words are especially variable. In the GA territory, where the **ɒ** sound is not regular or stable, the usual variation is between **ɑ** and **ɔ.** But not a few speakers have a slightly rounded **ɑ** or **ɒ** in the **w** words that is acoustically distinct from **ɑ** and **ɔ.** Not only in words with final *r* or *r*+consonant after the vowel, as *war, warm,* but in words with intervocal *r,* as *warrant, quarrel,* and in such words as *want, wash, wasp, wander, wanton,* which would normally have **ɑ** or **ɒ, ɔ** is often used, both in America and England (Baker has: **wɔːn, wɔːnd, wɔːndər, wɔːnt, wɔːʃ, wɔːsp**). *Warren,* Ohio, is regularly **wɔ˞ɪn.**

The word *water* has had double forms since ME times. That

[11] Grandgent, *loc. cit.,* p. 220.

with long vowel is now **wɔtɚ**, and with short vowel **wɑtɚ**, **wɒtɚ**. In GA territory **wɑtɚ** is very common. The pronunciation with intermediate vowel is frequent in GA territory. Convenient test phrases are *hot water*, *waterpot*, *falling water*, *waterfall*.

(10) Words like *daunt*, *gaunt*, *gauntlet*, *haunch*, *haunt*, *jaunt*, *laundry*, *saunter*, *vaunt*, in which *au* is followed by **n**+a consonant, vary in cultivated speech between **ɔ** and **ɑ**. The pronunciation with **ɑ** is especially frequent in New England. In England and the rest of America **ɔ** predominates. The 18th c. pronunciation **dænt, hænt, gænt, dʒænt** may still be heard in dialect.

o

292. (1) Repeat the descriptive name of **o**.

(2) Comment on the sound and its spelling in *go*, *rope*, *boat*, *old*, *folk*, *toll*, *won't*, *yeoman*, *shoulder*, *mould*, *soul*, *bowl*, *hoe*, *slow*, *though*, *beau*, *impost*, *obey*, *proceed*, *shadow*.

293. In South England, and often in America, this vowel is a diphthong, having a more or less distinct **ʊ** as its final element. The diphthong **oʊ** occurs in America under the same conditions as **eɪ** (see **e**, §261). As with British **ɛɪ**, the first element of the diphthong **oʊ** in England is somewhat different from the simple vowel **o**; it is sometimes lowered toward **ɔ**, but more usually advanced toward the central position, the symbols **əʊ** or **ɜʊ** fairly well representing the sound heard in Southern British. As we go northward in England we encounter the more **o**-like sound (mid-back-round), till in Northern England and Scotland the pure **o** is found.

In both the diphthongs **eɪ** and **oʊ** the tongue often does not fully reach the position indicated by the second symbol of the diphthongs.

294. The word *brooch*, in origin the same as *broach*, is pronounced **brotʃ**, though the spelling-pronunciation **brutʃ** is not uncommon. The pronunciation **nolɪdʒ** for *knowledge*, often used by 18th and 19th c. British clergymen and literary men, which

Tennyson also insisted upon, was merely the result of reasoning that it ought to be pronounced like *know*, in ignorance of the ordinary laws of historical sound-change. The *o* in *knowledge* was regularly shortened, as in *husband* (cf. *house*), *linen* (cf. *line*), etc. In the nouns *process* and *progress*, America favors **ˈprɑsɛs, ˈprɑgrɛs,** while England prefers **ˈprosɛs, ˈprogrɛs,** but the former are also used in England (with **ɒ**). Here two analogies interfere: that of verbs like **proˈgrɛs, proˈsid,** and on the other hand words that change their first vowel when the accent is shifted, as **proˈklem—ˌprɑkləˈmeʃən, proˈfen—ˌprɑfəˈneʃən, proˈpoz—ˌprɑpəˈzɪʃən, proˈdɪus—ˈprɑdɪus.**

295. The words *sew* **so,** *shew* **ʃo,** *strew* **strɪu, strʉ** and *shrew* **ʃrɪu, ʃrʉ** illustrate a development often exemplified in English spelling and pronunciation. In Early Modern, each of these words was current in two pronunciations with a corresponding spelling for each: *sew* **sɪu**—*sow* **so**; *shew* **ʃɪu**—*show* **ʃo**; *strew* **strɪu**—*strow* **stro**; *shrew* **ʃrɪu**—*shrow* **ʃro.** Note the following rimes: *sew:new* (1600); *sow:show:know* (Dryden, c. 1700); *shew: hew, show:snow* (Wither, 1622); *shrew:pursue* (c. 1500); *shrow: woe* (Shakespeare, c. 1596); *strew:you* (Herrick, 1648); *road: strow'd* (Swift, 1727).

Of the pair *shrew, shrow* are now preserved only the pronunciation **ʃrɪu** or **ʃrʉ,** and the spelling *shrew*, the pronunciation **ʃro** and the spelling *shrow* now being obsolete (except for an occasional pronunciation of *Shrewsbury*,[11a] especially in **ʃrozbərɪ skul**). Of *strew, strow* both pronunciations and both spellings are preserved, *strow* **stro** being, however, archaic or dialectal. Of *shew, show* only one pronunciation **ʃo** is preserved but (in England) both spellings are still used. Of *sew, sow* only one pronunciation, **so,** is preserved, and one spelling *sew*, which belongs to the obsolete pronunciation. How do you pronounce *ewe?* See Webster.

[11a] Though of different origin, this conformed to *shrew*.

296. In New England a variety of *o* sound is heard in some words, which is thus described by Professor Grandgent: "In a great many words **oː** is shortened and slightly advanced, in rustic New England speech, becoming **ò**. This vowel is used by educated New England speakers in about fifty common words and their derivatives, and it certainly prevails in the cultivated usage of this region in *Polk*, *polka*, *whole*, and probably in *both*, *folks*, *Holmes*, *most*, *only*, and some others."[12] Professor Grandgent also describes this sound as a rounded ʌ.[13] In the rustic speech of Connecticut this **ò** is often unrounded, making a word like *home*, **hʌm.** Several words with this "New England short *o*" have found their way into the Middle West with New England emigrants, either in the unrounded pronunciation, or at least what sounds to unaccustomed ears like ʌ. The author's grandfather (a New England settler on the Western Reserve) pronounced what is now recalled as **kʌt, hʌl, stʌn,** but may have been **kòt, hòl, stòn,** for *coat*, *whole*, *stone*. Ellis[14] mentions the ʌ sound in England for words like *stone*. The author remembers a native of England who said **tʌm** for *at home* (or *to home*).

297. The unaccented vowel spelt *-ow* in words like *follow sparrow*, *swallow* has several times in its history been reduced normally to **ə**, and then artificially restored again to **o**, mainly from the spelling. This is now the conventionally "correct" pronunciation. But in GA these words are often pronounced in normal cultivated speech **fɑlö, spærö, swɑlö,** in which **ö** represents a sound close to **o**, but with the tongue farther forward toward the central position (see Figure 9, p. 66). In ordinary transcription (as elsewhere in this book) this **ö** is represented by **o—fɑlo,** etc. If the lip-rounding is lost, these words become **fɑlə, spærə, swɑlə,** etc., as they have repeatedly been in the past,

[12] *Loc. cit.*, p. 217.

[13] *German and English Sounds*, p. 16.

[14] Alexander J. Ellis, *Early English Pronunciation*, London, 1869, I, 95.

and still are in dialect and what Krapp called "general low colloquial."

In the words *bellows, gallows* the older pronunciations **bɛləs, gæləs** are still sometimes used by the cultivated (Luick, *Oxford*, Jones, Webster). Note also the double plurals **bɛləsɪz, gæləsɪz,** with the special development of meaning in the latter. See §250 (4).

ʊ

298. (1) Repeat the descriptive name of **ʊ.**

(2) Comment on the sound and spelling in *pull, full, put, sugar, wolf, woman, worsted, good, wood, wool, would, should, could.* Chaucer's forms of the last three words were *wolde* **woːldə,** *sholde* **ʃoːldə,** *koude* **kuːdə.** How can you account for the spelling of *could?* How has it affected the pronunciation?

The name *Boleyn* **ˈbʊlɪn** is merely another spelling of *Bullen. Bolingbroke* is pronounced **ˈbʊlɪŋˌbrʊk,** except as spelling-pronunciation has altered it. See §325.

For the variation in standard pronunciation between **u** and **ʊ** in words like *root,* see **u,** below, §§303.

u

299. (1) Repeat the descriptive name of **u.**

(2) Comment on the sound and its spelling in *loose, lose, school, move, who, shoe, you, group, route, wound, rude, true, threw, glue, flew, Hindu, whoever, Louise.*

For the diphthongal quality of **u,** see §34.

300. The name *Brougham,* and the derived noun *brougham,* are pronounced **brum, bruəm, broəm.** The name *Cowper* **kupɚ,** sometimes by spelling-pronunciation **kaʊpɚ,** is the same word as *Cooper, cooper* (see §303). The usual cultivated pronunciation of *route* **rut** is exceptional. In other words with the same original vowel (ME **uː,** spelt *ou*) the present pronunciation is **aʊ** (*house, cow, bound*). The normal historical pronunciation is preserved

in the popular pronunciation **raʊt.** The pronunciation **rut** is perhaps due to Modern French, and especially the phrase *en route*, partly Anglicized to **ɑn rut.**

301. The word *wound* **wund** has preserved its **u** sound owing to the influence of the rounded **w** before the vowel. But the pronunciation **waʊnd** has also been in good use, and is not entirely disused. See Webster. Can you think of any reason why the past tense of *wind* **waɪnd** is not also pronounced **wund?**

302. The spelling *oo* for the sound **u** results from the fact that this sound in ME was a long **oː** and was usually spelt *oo* to show its length (not its quality). By Early Modern, this sound had changed to **u,** but the spelling, as usual, did not change.

303. For various reasons this Early Modern **u** was often shortened and lowered to **ʊ.** In some cases it also changed from **ʊ** to **ʌ**; hence we have such words as *blood* **blʌd,** *flood* **flʌd,** *glove* **glʌv,** *done* **dʌn,** *gums* **gʌmz.** But in many words it remained in the intermediate stage **ʊ,** as in *good* **gʊd,** *foot* **fʊt,** *hood* **hʊd,** *stood* **stʊd,** *book* **bʊk,** *took* **tʊk,** *look* **lʊk,** etc. As a result of these different developments, many words in present English vary in pronunciation between **u** and **ʊ.**

Transcribe the following words in the pronunciation you can first remember: *broom, coop, Cooper, gloom, hoof, hoop, moon, nook, noon, proof, roof, rook, room, roost, rooster, root, soon, soot, spook, spoon, stoop, woof.*

The variation in cultivated usage between **u** and **ʊ** in these words is shown by Professor Grandgent[15] by statistics giving the pronunciation of a group of about 160 educated people so distributed as to give a fair estimate of the practice of cultivated speakers in the whole country. The whole report should be studied. Only illustrative statements are here quoted.

The report shows the whole country nearly unanimous for

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[15] *Mod. Lang. Notes,* VI, 458 ff. (1891).

u in *gloom, moon, noon, roost, stoop*, and showing a strong preference for **u** in *proof, rooster, spook, woof*, and for **ʊ** in *butcher, rook*. For *broom*, the South is evenly divided between **ʊ** and **u**. For *Cooper*, the South prefers **ʊ**, while the North decidedly prefers **u**. For *hoof*, the South, Penn., and N. J. are about evenly divided between **ʊ** and **u**; New England, N. Y., and the West show strong preference for **ʊ**. For *roof*, the South is nearly unanimous for **u**, while the North shows only a slight preference for **u**. For *room*, the South is evenly divided between **ʊ** and **u**; Penn. and N. J. are nearly unanimous for **u**; New England shows 40% for **rum** and 60% for **rʊm**; N. Y. and the West, 60% for **rum** and 40% for **rʊm**. For *root*, the South, Penn., and N. J. show only **rut**; New England, 62% for **rut**; N. Y. and the West, 38% for **rut**. **rʊt** is particularly common in N. Y. and northern Ohio. For *soon*, the South, Penn., and N. J. are nearly unanimous for **sun**; New England shows a slight preference for **sʊn**; N. Y. and the West a slight preference for **sun**. For *soot*, New England, Penn., and N. J. are evenly divided between **sʊt** and **sut**; elsewhere there is a strong preference for **sut**. (The general vulgar form is **sʌt**.) For *spoon*, the pronunciation **spʊn** is almost confined to New England, which shows 30% for **ʊ**.

For *broom* Jones gives **brʊm, brum**; for *room*, **rʊm, rum**; regularly **rʊm** in compounds like *bedroom* **bɛdrʊm**; for *soon*, "rarely **sʊn**." Wyld calls **rum** provincial, but prefers **rʊmɪ, rʊmɪlɪ, rʊmɪnɪs**; Blandford (see footnote 72, §227) pronounces **rum**. For the variation in this whole class of words, see Webster, *Pron.* §200.

Give an enlightened answer to the question, "Which is correct, **ruf** or **rʊf**? Would you give the same answer to the same question about **fud, fʊd, mun, mʊn**? What would be a more intelligent question than "Which is correct?" See §5, pp. 14, 15.

ɝ

304. (1) Repeat the descriptive name of ɝ.

(2) Comment on the spelling and the sound in *fir, first, fur, turn, term, were, purse, myrtle, pearl, word, world, journey, colonel, stirring, conferring, purring, blackbird.*

305. This is the vowel in *hurt, stir, her, stirring,* of those speakers who do not "drop their *r*'s." In the author's speech its sound is identical with the whole word *err.* The point of the tongue is raised from the front of the mouth and curled more or less backward toward the roof of the mouth, without actual contact of the point. During the utterance of the vowel ɝ the tongue is held fixed in the same position that it takes momentarily in the beginning of the consonant **r** in *rate.* This produces the "inverted," or "retroflex" vowel. Other types occur in GA, in which the retroflexion is slight, or replaced by raising and retraction of the tongue, but in which the vowel is still "*r*-colored," giving the impression of an *r* sound. The symbol for this sound is the IPA symbol ɜ (as used in British *bird* **bɜd**) with the addition of the IPA hook indicating retroflexion. The symbol ɝ is used in syllables of perceptible stress. The corresponding sound in unstressed syllables is ɚ, formed from ə in the same way. The ordinary spelling of words like *hurt, stir,* etc., suggests a vowel followed by **r,** but in this case the *r* sound is itself the vowel. Hence the symbol ɝ alone is used in *hurt.*

306. In the author's speech, and in that of his region so far as he has observed, ɝ and ɚ are the only retroflex vowels in general use. With other vowels, as in *here, there, are, for, door,* etc., there is an *r* diphthong, or centering diphthong, in which the first element shows the quality of a separate vowel before the tongue takes the retroflex position. Other observers confirm this for GA.[16] Other retroflex vowels occur here and there, of course;

[16] W. A. Read, *Jour. Eng. and Germanic Philol.,* April, 1923; Martin Joos, *Le Maître Phonétique,* Jan.–Mars, 1934, pp. 5–6; Oct.–Dec., 1934, pp. 93 ff.

but they are not characteristic of GA in the same sense that they are said to be of certain British dialects.

ɜ

307. This is the central vowel pronounced by those who "drop their *r*'s" in words like *stir*, *stirred*, *term*, *deter*, *fur*, *hurt*, particularly residents of Southern England, parts of New England, of New York City and vicinity, and parts of the South. Those who are not accustomed to make this vowel may approximate it by first sounding their natural vowel in *fur*, and then repeating it with the point of the tongue thrown forward and lower. Another method is first to sound the word *bud* **bʌd** with a lengthened ʌː, and then repeat it with the jaw raised a trifle higher and the tongue slightly advanced. In both America and England the central part of the tongue is higher than the back and the point, and the tongue as a whole is in central position.[17] Like ɝ, ɜ is used only in stressed positions, the corresponding unstressed vowel being ə.

308. Observe that words spelt *ir* (*stir*) or *ir*+a consonant (*third*), those spelt *er* (*re*|*fer*) or *er*+cons. (*term*), and those spelt *ur* (*fur*) or *ur*+cons. (*hurt*) are now all sounded alike—ɝ in GA (**stɝ, θɝd, rɪ**|**fɝ, tɝm, fɝ, hɝt**) and ɜ in Southern England, Eastern New England, New York City, and parts of the South (**stɜ, θɜd, rɪ**|**fɜ, tɜm, fɜ, hɜt**). In ME these three different vowel sounds were pronounced as spelt, like modern ɪ in *spirit*, ɛ in *very*, and ʊ in *sure* (**stɪr, tɛrm, hʊrt,** etc.). As the *r* sound after a vowel ceased to be trilled (as it still is in Scottish), there developed between the vowel and r a glide vowel ə (**stɪər, tɛərm, hʊərt,** etc.). Then in Early Modern the high-front ɪ, the mid-front ɛ, and the high-back ʊ were assimilated to this central glide vowel ə, and so became alike one central vowel of the quality ɜ.[18] The *r* sound following then "colored" this preceding

[17] Grandgent, *German and English Sounds*, p. 33; Jones, *Phonetics*, §§342 ff.

[18] The ɪ sound was first changed to an intermediate stage ɛ. This stage is preserved in an older pronunciation of *Miriam* as **mɛəɹəm** (the same name as

vowel to the sound ɝ, a vowel of more or less retroflexed tongue like that of the *r* sound, which now disappeared as a separate *r* sound. In South England, and parts of Eastern and Southern America, the "*r* color" itself disappeared, leaving the sound ɜ. The GA ɝ represents, as usual, an earlier standard British stage (18th c.) and the British and Eastern and Southern American, a later stage of development, in which the only trace of an originally trilled **r** is now the centralized vowel ɜ without "*r* color," in place of the original high-front ɪ, mid-front ɛ, and high-back ʊ.

309. When the **r** was between vowels, as in *spirit*, *very*, *hurry*, the same change also originally took place.[19] But parallel and later developments (spelling influence and foreign loan-words, etc.) tended to preserve or to restore the ɪ, ɛ, and ʊ sounds. Thus the original ɪ and ɛ became reestablished before intervocalic **r** both in America and England, so that we now pronounce **spɪəɹɪt, vɛəɹɪ,** etc. The ʊ sound, however, in GA was not restored, but remains ɝ. Hence in words like *hurry*, *current*, *furrow*, *courage*, *worry*, *thorough*, etc., GA still has **hɝɪ, kɝənt, fɝo, kɝɪdʒ, wɝɪ.** But in British speech, and to some extent, but not entirely, in Eastern and Southern America, the Early Modern ʊ is now ʌ (as in other "short *u*" words), and these words are now in England **hʌrɪ, kʌrənt, wʌrɪ,** etc., and to some extent in America.[20] Intermediate sounds between ɝ and ʌ also occur, but GA universally has ɝ in such words. Moreover, in

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Merriam), of *Tyrwhitt* as **tɛəɹɪt** (now **tɪəɹɪt**), of *miracle* as **mɛəɹɪkl̩.** Walker (1791) says of *spirit:* "The general sound of the first *i* in this word and all its compounds, was, till lately, the sound of *e* in *merit;* but a very laudable attention to propriety [i.e., to spelling] has nearly restored the *i* to its true sound; and now *spirit*, sounded as if written *sperit*, begins to grow vulgar."

[19] Luick, §§552 ff.

[20] But when words like *fur* **fɜ**, *stir* **stɜ**, *refer* **rɪˈfɜ** are followed by vowels in derivatives as in *furry*, *stirring*, *referring*, the ɜ does not become ʌ, but remains ɜ after the analogy of the main word: **fɜrɪ, stɜrɪŋ, rɪˈfɜrɪŋ,** etc.

GA several words spelt *i* have also preserved their earlier ɝ sound, and the prevailing GA pronunciation of *squirrel*, *stirrup* is **skwɝəl, stɝəp.** *Sirup* is pronounced naturally in much of the GA territory **sɝəp,** especially in the maple sugar districts; but the pronunciation **sɪrəp** is now usually regarded as "correct."

The application of the same older pronunciation to ɛ words (*very*, *America*) though sometimes made by the illiterate, is everywhere substandard.[21]

310. A local dialect pronunciation in New York City of words like *bird* is popularly represented by the spelling *boid*. This is not, however, the diphthong **ɔɪ,** but rather **ɜɪ,** in which the latter part of an *r* diphthong is changed from **r** to **ɪ.** This change is also made independently of New York in parts of the South. It is reported in New Orleans, I have heard it from educated natives of Georgia, and it is reported sporadically elsewhere in the South.

311. In many parts of the South an *r* colored vowel, with more or less simultaneous elevation of the tongue is found in stressed syllables, which strikes the ear as much more like ɝ than ɜ. It is especially frequent in the more northern parts of the South. But the same speakers usually have ə instead of ɚ in unstressed syllables. Thus they pronounce further **fɝðə,** and say **tʃɝtʃ,** but **bɛtə.**

ɚ

312. This is the GA unstressed retroflex or *r*-colored vowel, represented by the letters *er* in *better* **bɛtɚ,** *perceive* **pɚˈsiv.** It corresponds to the stressed retroflex vowel ɝ, having similar tongue position, but shorter and laxer. Both vowels are shown

[21] The view that the pronunciation **hɜɪ, kɜənt,** etc., is substandard or dialectal only, was shown to be wrong by Grandgent (*Mod. Lang. Notes*, VI, 1891, p. 85), who found that ʌ was in the majority only in eastern Massachusetts, New York City, and perhaps Pennsylvania. It is probably even less frequent now.

in ˈfɝðɚ, pɚˈvɝs. Just as the stressed ɝ of GA is replaced by ɜ in the speech of those who "drop their *r*'s" (Southern England, Eastern and Southern America), so the unstressed ɚ of GA is replaced by the British, Eastern, and Southern unstressed ə. Thus GA **fɝðɚ** is replaced by British **fɜðə**, and GA **pɚˈvɝs** by British **pəˈvɜs**. The symbol consists of the IPA ə with the IPA modifier attached that indicates retroflexion, parallel to the symbol ɝ.

313. Just as ə is the unaccented sound corresponding to almost all the accented vowels (**mæn—postmən, ɪmˈpoz—ˌɪmpəˈzɪʃən,** see *Gradation*, §130), so ɚ is the unaccented *r*-colored vowel corresponding not only to stressed ɝ, but to other accented vowels that form parts of the centering diphthongs; as **rɪˈkɔɚd—ˈrɛkɚd, rɪˈvɪɚ—ˈrɛv ɚ ənt** (see *Gradation*, §130).[22]

314. In a large number of words final ɚ or ə is represented by various spellings; as *-ar, -er, -ir, -or, -our, -ur*. These endings come from various sources: from Old English *-ere*, Old French *-ier, -aire, -our, -eur*, and Latin *-or*. After these endings had come to be pronounced all alike (at least as early as the middle of the 18th c. and probably earlier), the spellings became much confused. Some speakers, unaware of the history of the ending ɚ, ə, attempt to distinguish the pronunciation of the endings *-er* and *-or*. Not only is such a distinction contrary to universal usage for at least 200 years, but its absurdity becomes apparent when one knows that, e.g., *bachelor* was formerly spelt *bacheler, -ier, -ere, -ar;* that *tailor* was spelt *tailour, -ur, -ere, -er, -ear, -eor,*

[22] In the ordinary spelling of colloquial speech the letters *er* often represent a separate word, an expletive indicating hesitation or embarrassment, as in "I—er—really, I don't know." Here *er* represents the sound ə, more or less prolonged. This spelling doubtless arose from the fact that in Southern England and Eastern America the letters *er* commonly represent the sound ə in such words as *better* **bɛtə**, *uppermost* **ʌpəmost**, *permit* **pəˈmɪt**. Readers who do not "drop their *r*'s" often misread this expletive *er* as ɚ or ɝ, though when not reading they use ə naturally enough in the pauses of their own speech.

-eour, *-eur*, *-ior;* that *sailor*, *chancellor*, *ancestor*, and many other words now spelt with *-or* were formerly spelt with *-er*. It is absurd to suppose that there was a different pronunciation for each spelling; so today the final syllables of such words as *baker*, *liar*, *sailor*, *augur* are exactly alike in cultivated speech, being either ɚ or ə. A widespread popular notion that one is pronouncing more correctly by saying ˈselɔɚ than by saying ˈselɚ is based on the false idea that the present-day spelling-form of a word is the word itself, to which the pronunciation ought to conform; whereas, in fact, the present spelling-form is only one of many spellings, which happens to survive, and the word itself has lived for generations quite independently of the changing and imperfect signs used to suggest it in writing.

315. In the foregoing §§312–14 ɚ is a syllabic vowel, the center of an unaccented syllable, either alone, as in *better* **bɛt-ɚ**, or with a consonant, as in *perceive* **pɚ-ˈsiv**, *papers* **ˈpe-pɚz.** ɚ is also found as a nonsyllabic *r*-colored vowel, the second element of a centering diphthong, as **ɪɚ** in *here* **hɪɚ**, **ɑɚ** in *far* **fɑɚ**, **oɚ** in *more* **moɚ**. See §§352 ff.

This ɚ, like the other vowel *r* sounds ɻ and syllabic ɚ, developed out of a consonantal **r**—either trilled, as yet in Scotland in words like *fear* **fiːr**, or fricative. When a vowel follows the *r* sound, it is still described in England as a consonant, as in *very* **vɛrɪ**, either fricative or the "single-tap" variety of tongue-point trill. In this case the **r** must be regarded as beginning the syllable **-rɪ**. In GA it has become quite vocalic and ends the syllable (**vɛɚ-ɪ**).

ə

316. (1) Repeat the descriptive name of ə.

(2) The symbol ə, as used in this book, represents a central unstressed vowel of somewhat varying quality. It varies in quality between the limits of unstressed **ɪ**, as in *added* **ædɪd**,

and stressed ʌ, as in *button* ˈbʌtn̩ (see Figure 9, p. 66). Its quality is much affected by surrounding sounds.[23] It may roughly be described as an obscure neutral sound, made with the tongue in a resting position, different in quality from any stressed vowel, but most like ʌ. It is not, however, merely the unstressed form of ʌ. See §21, second paragraph.

317. Transcribe the following in your usual conversational pronunciation: *idea, several, indignant, distance, garland, William, Christmas, breakfast, gentleman, alone, awake, account, notable, quiet, science, judgment, telephone, effect, decent, elephant, specimen, gentlemen, quality, principle, ability, difficult, April, gallop, kingdom, welcome, purpose, connect, compel, obtain, nation, suppose.*

318. The ə sound in unstressed syllables of natural speech may be represented in the current spelling by almost any letter or digraph. This results from an important development of the language. In OE the vowels of these unstressed syllables were much more distinctly pronounced, and were different sounds in accord with the different spellings. The leveling of these different sounds to the one sound ə, with the old spelling retained, was a very gradual process, which is still going on. Compare the careful pronunciation of **prograem** with the more popular **prograəm.** By careful pronunciation, such as might be used in a public reading, some of these unstressed vowels may be restored to something like their full sound; as in **proˈdɪus** for **prəˈdɪus** of

[23] Sometimes the use of the symbol ɪ or ə to represent the sound in *added,* etc., seems to me largely a question of the interpretation of the meaning of the symbol. Some of my colleagues write **ædəd,** etc., where I hear them speak a sound so different from that in *sofa* **sofə,** and so much nearer to the sound I hear in *selfish* **sɛlfɪʃ,** that ɪ seems to me a better representation. But, no doubt, they hear in *added* a sound so much different from that in *bit* **bɪt,** that ə seems better to them as a symbol for it.

ordinary speech; **ɑbˈten** for colloquial **əbˈten; kəˈrɛkt** for colloquial **kəˈrɛkt, kəˈɛkt; æˈtɛnʃən** for **əˈtɛnʃən**, etc. It is, however, as the student can test for himself from any page of prose, **a very small proportion of words to which the full vowel sound of the unaccented syllables can be restored without making the pronunciation wholly unnatural and even unintelligible.** E.g., it will not do, even in formal address, to say **dɪstæns** for **dɪstəns, brɛkfæst, brɛkfast,** for **brɛkfəst, dʒɛntɪlmæn** for **dʒɛntl̩mən, pʂpos** for **pʂpəs, rɪtɛn** for **rɪtn̩, ɑbʌv** for **əbʌv, prɪnsɪpæl** for **prɪnsɪpl̩, ɪgnorænt** for **ɪgnərənt, ði mæn** for **ðə mæn, e grælˈmæəɪæn** for **ə grəˈmæəɪən, æn ɔənemɛnt** for **ən ɔənəmənt.**[25] Many words in ordinary speech would be unintelligible with the unstressed vowels fully sounded.

319. The same law of obscuration of vowels in unstressed syllables applies to words—chiefly monosyllables—that have the full vowel when pronounced by themselves or when they have sense-stress. See §§130–137 ff.

320. Schoolteachers and teachers of public speaking are in danger of giving their pupils lasting false impressions by failing to recognize this important law of the English language. In their effort to inculcate habits of clear articulation—most commendable in itself—they often give pupils the idea that distinct pronunciation means giving equal prominence to the vowels of all syllables. But disturbing the relation existing in natural speech between the clear stressed and partly stressed vowels and the obscurer unstressed vowels cannot make the result either clearer or more beautiful. The artificial pronunciation **kɑntɛntmɛnt** is neither clearer nor more beautiful than the

[25] The speech of many American public speakers is marred, for those accustomed to hear good English, and robbed of sincerity, by the frequent occurrence of the stressed forms **e** and **æn** for the correct unstressed **ə** and **ən** See *American Speech*, June, 1931, p. 368.

normal **kəntɛntmənt.** Nor is there any reason why the latter cannot be just as clearly enunciated as the former. Clear enunciation of the consonants and vowels as they are, with due attention to time-length and sonority, and with that naturalness which is gained only by observing the normal relation between stressed and unstressed syllables, distinct and obscure vowels, will produce a clearness which is both beautiful and natural.

The late Professor Sweet, of Oxford University—a pioneer authority on phonetics—expresses the views of competent scholarship on this point when he says, "The general result [of ignoring the relation between distinct and obscure vowels] is that the pupil is forced to acquire an artificial elocutionary language distinct from that of everyday life. His elocution suffers from this in many ways. The constant effort to avoid falling back into natural habits of speech robs his delivery of all freshness and freedom, the very muscles of his throat partake of the general rigidity, and the purity of his tone is impaired. Even when the artificial habits by long practice become a second nature, the result is always unpleasing, because it is artificial and unnatural. . . . It has often been argued that by giving an artificial distinctness to weak sounds, as in the orthographic pronunciation of our dictionaries, we make the words more distinct. It is of course true that in themselves such forms as **ænd, tu, fɔə** are more sonorous, and in so far more distinct, than **ṇ, tə, fə,** but it does not necessarily follow that the context is made more intelligible by substituting an unexpected strong form for the natural weak one. In fact the contrary is so much the case that misunderstanding may arise from such substitutions. . . . The truth is, that we cannot make words more distinct by disguising them."[26]

[26] A radio announcer well illustrated this by announcing a program for the next day **ˈfrɑm ˈwʌn ˈtu ˈθri.** He meant **frəm ˈwʌn tə ˈθri.**

A great American scholar, the late Professor William D. Whitney, in the Preface to the *Century Dictionary* (1889) says aptly, "To write (as systems of re-spelling for pronunciation, and even systems of phonetic spelling, generally do) the vowels of unaccented syllables as if they were accented, is a distortion, and to pronounce them as so written would be a caricature of English speech."

One of the most unfortunate results of such artificial emphasis by a speaker is the fact that his pronunciation calls attention to itself, since it differs from unconscious cultivated pronunciation, and thus distracts the attention from the thought and feeling. The best pronunciation is that which is unnoticed by the hearer.

The student should rid himself of a common misconception; namely, that the obscuring of certain consonants and vowels owing to lack of stress on syllables or words is the result of a corruption of good English. On the contrary, it is the result of a perfectly normal linguistic development of English according to ancient laws well understood by linguistic scholars. It is the artificial departure from this characteristic of English that is a corruption of the actual pronunciation of the cultivated people who are carrying on the world's affairs.

321. In the unstressed syllables of many words good usage varies between **ə** or **l̩, m̩, n̩** and **ɪ.** Transcribe the following words showing your own habit in this respect: *character, purchase, pigeon, cushion, curtain, evil, level, barrel, travel, squirrel, vowel, Caleb.* With many cultivated people the first five of these are pronounced **kærɪktə˞, pɜ̩tʃɪs, pɪdʒɪn, kuʃɪn, kɜ̩tɪn.** The pronunciations **ivɪl, lɛvɪl, bæə˞ɪl, trævɪl, skwɜ̩ɪl, momɪnt** have only recently become unusual, and **vaʊɪl** is still heard.

With some speakers the unstressed **ɪ** of words like *message* **mɛsɪdʒ,** *goodness* **gʊdnɪs,** *greatest* **gretɪst,** tends to become lowered and retracted to **ə.** This results in such pronunciations

as **ɛndəd, rozəz, gʊdnəs, gretəst, ɑnəst, aɪ no ət,** etc. Professor Grandgent's investigations in 1895[27] indicated that this was then commonest in New York City, Philadelphia, and parts of the West and South, and that it was regarded as vulgar in other parts of the country. Krapp[28] believed the last statement no longer true. It is true that to the ears of many accustomed to say **gʊdnɪs, aɪ no ɪt,** the pronunciation **gʊdnəs, aɪ no ət** is unpleasant. But apparently **ə** for **ɪ** in such cases is on the increase. Observe your own practice in this regard.[29]

ʌ

322. (1) Repeat the descriptive name of **ʌ.**

(2) Comment on the sound and its spelling in *sun, son, shove, done, does,*[30] *doth, among, mongrel, cover, plover, ton, front, compass, constable, flood, double, enough, income, undo, misunderstand.*

323. This is the so-called "short *u*" sound in *run, come.* In tongue position it varies somewhat in different regions. The author's **ʌ** is somewhat higher and farther forward than that described by Jones for Southern British,[31] being definitely a central vowel, but low and retracted. It lacks the slight **a** or **ɑ** coloring which the American often detects in the British **ʌ.**

324. Modern **ʌ** developed from Early Modern **ʊ,** probably through the stages of **ʊ,** advanced **o, ɜ, ʌ** with successive de-

[27] *Die Neueren Sprachen,* II, 449.

[28] *Standard English in America,* §173.

[29] The native speech of the Western Reserve in Ohio shows **ɪ** in these words, but recent college classes gathered from Ohio and neighboring states show many instances of **ə.** Grandgent was perhaps wrong about its frequency in the South.

[30] Cf. William Dwight Whitney: "I myself, with many others, grew up (in Northampton, Mass.) to pronounce *does* naturally with the real short *ŭ* of *full,* the true and natural abbreviation of the long *ū* of *do*—like *says* (*sĕz*) from *say* (*sē*)." *Oriental and Linguistic Studies,* New York, 1874, p. 224.

[31] *Phonetics,* §§334 ff.

crease of lip-rounding. The stages o+ and ɜ may be heard in Southern American pronunciation. In England the ʊ sound (or near it) is preserved in the Northern dialects, but in Scotland it has become ʌ as in standard British.

325. In many common words such as *come, love, some, honey,* the ʌ sound is spelt with *o*. In OE the corresponding sound (then ʊ as in *full*) was spelt with *u: cuman, lufu, sum, hunig*. But somewhat before Chaucer, when French scribes in England were making many manuscripts, they were in the habit of spelling with *o* words that had the ʊ sound, because French had an ʊ sound derived from an older o and still written with *o*. So these scribes spelt with *o* English words that had the ʊ sound, whether they were native English or borrowed from French, especially if *u* was next to *n, m, u, v, w,* with similar strokes, writing English *come, love, some, honey,* as well as French derivatives *cover, front;* and we have followed their custom ever since. The common words we continue to pronounce ʌ regardless of the spelling, because they are all familiar before we learn to spell. But less familiar ones, which we learn from print or see in print oftener than we speak them, such as *bombast, dromedary, combat,* we are apt to pronounce with ɒ or ɑ because they are spelt with *o*. Such words therefore frequently have two pronunciations, one a traditional, and the other a spelling-pronunciation. Sometimes only the latter prevails. See §§142 ff., *Spelling-pronunciation.*

A different group of words, such as native English *other, mother, brother, flood, blood,* etc., with ʌ are spelt with *o, oo,* because they were formerly pronounced with o, which later changed to ʌ. See §303.

Frontier is variously pronounced. See Webster, *Pron.* §277, for the different pronunciations. The prevailing one in America is frʌnˈtɪɚ. The word *wont,* "custom," is historically wʌnt, having developed regularly from Early Modern wunt. But the

word being now somewhat rare tends to the spelling-pronunciation **wont.** The verb *won't* contains the same vowel, from ME *wol not* ˈ**wʊl nət, wʊnt, wʌnt.** The influence of the spelling, backed by the schoolteacher, and possibly the analogy of the word *don't* **dont,** has made general the pronunciation **wont.** But **wʌnt** is still used by many cultivated speakers.

326. The word *hiccup* is pronounced **hɪkʌp** or **hɪkəp.** The spelling *hiccough* is a result of the imaginary notion that the word had something to do with *cough.* The correct spelling is *hiccup*, given first place in the *Oxford*, Webster, *New Century*, *Standard;* and *hiccough* "ought to be abandoned as a mere error" (*Oxford*). If it is not abandoned, we may look forward to the spelling-pronunciation **hɪkɔf,** which is actually cropping up in college classes. Organically, a hiccup is precisely the opposite of a cough. Explain.

Diphthongs

327. Though the term *diphthong* means "two sounds,"[32] strictly a diphthong consists of one continuous gliding vowel sound. For example, the diphthong **aʊ** in *house* consists not merely of **a**+**ʊ,** but of one continuously changing sound beginning with the tongue and lips in the position for **a** without remaining thus long enough for a distinct **a,** changing through a series of positions intermediate between **a** and **ʊ,** and coming at the end to or near the position for **ʊ.** The same is true of **aɪ** and **ɪu.** It is true to a less degree of **ɔɪ,** in which there is the impression of a distinct **ɔ** followed by **ɪ** with a briefer glide connecting the two.

The foregoing diphthongs do not give the impression of two syllables, because the force of utterance is strongest at the first and decreases at a uniform rate through the whole diphthong, whereas if the diphthong be made into two separate sounds, as

[32] As distinguished from *digraph,* "two letters for one sound," as in *beat.*

in *awe-inspiring* **ɔ ɪn-**, the sonority nearly ceases at the end of the first element, and then increases again in the second element.

Though true diphthongs are continuous glide sounds, for convenience we speak of the first and second elements. In saying that the first element of **aɪ** is **a**, we mean that the diphthong begins with the position for **a**. The stressed part of a diphthong is called the **syllabic vowel** of the diphthong, and the unstressed part the **nonsyllabic vowel.** But it must be remembered that they are not separate vowels, being only parts of a continuously gliding vocalic sound.

328. Diphthongs which receive the main stress on the first element, as **aɪ, aʊ, ɪu, ɔɪ,** are known as **falling diphthongs.** There are also **rising diphthongs,** receiving greater stress at the end. The combination **wɪ** in *win* is a rising diphthong that is the opposite of the falling diphthong **ɪu.** Strictly, therefore, the symbol **w** does not stand for a uniform sound, but for the first element of as many rising diphthongs as there are different vowels to follow **w: wɪ, wi, we, wo,** etc. So the symbol **j** represents the first element of an equal number of rising diphthongs **ji, je, jə,** etc.—for neither **w** nor **j** can occur without their following vowel. Cf. §§224 (2), 230, 234 (2).

329. Besides the so-called full diphthongs **aɪ, aʊ, ɪu, ɔɪ,** there are the partial or imperfect diphthongs often heard in America, as in final vowels: **sno(ʊ), de(ɪ);** and regularly in Southern England, as in **snoʊ, dɛɪ.** In such partial diphthongs the glide movement does not begin till a distinct vowel is first heard, and then there follows a more or less distinct "finish" or "vanish." See §§261–3.

aɪ

330. (1) This diphthong is commonly called "long *i*," and often mistaken for a simple vowel because of its spelling with one letter, as in *ride*. That it is not a simple sound, but a gliding sound, can easily be seen by trying to prolong it, or by con-

tinuously repeating it without break in the voice. The spelling *i* for the diphthong **aɪ** comes from ME, when the sound was a simple **iː**. This gradually became a diphthong, through the probable stages **ɪi, eɪ, ɜɪ** to present-day **aɪ**. (Trace the change of the first element on Figure 9, p. 66.) But the ME spelling *i* for **iː** has been kept for **aɪ**.

(2) Comment on the sound and its spelling in *aisle, height, rite, right, write, wright, buy, sky, lie, lye, fire, liar, choir, eye, aye, I, idea, biology, diameter.*

331. The quality of the **aɪ** sound varies in different regions, or among different speakers in the same region, chiefly in its first element. The author's sound has its first element intermediate between **a** and the central position **ɜ**. The GA **aɪ** is not essentially different from the standard Southern British diphthong. Both are approximately represented by the symbols **aɪ**. As with **eɪ** and **oʊ**, the tongue usually does not quite reach the position of **ɪ** for the second element. See §293, end. An American variety, found often in parts of the South, has its first element nearer **ɑ**. This is often heard in Southern dialect when the second element is omitted. But the variety **ɑɪ** is also frequent in the North. In Scotland and the North of England a variety approximately **əɪ** is common. In the *Oxford Dictionary* the symbols **əɪ** are used, the first element being described as a central vowel. This is acoustically very close to **aɪ**, and it is possible that **əɪ** would be as good a representation of the standard American sound as **aɪ**, since the **a** tends to be higher toward the central position.[33]

332. In Eastern Virginia (and probably elsewhere in the South) and in Toronto, Canada, and vicinity (possibly in Eastern Canada generally), a distinction is made in the **aɪ** diphthong according as it occurs (1) before voiceless consonants and

[33] For a similar type of **aɪ**, see C. K. Thomas, *Le Maître Phonétique*, Avril–Juin, 1933, p. 35.

(2) before voiced sounds or finally. Thus *advice, bite, life, rice* are there pronounced **ədˈvɜɪs, bɜɪt, lɜɪf, rɜɪs,** while *advise, hide, file, bias, lives, rise, fly, high* are **ədˈvaɪz, haɪd, faɪl, baɪəs, laɪvz, raɪz, flaɪ, haɪ.**[34]

A similar distinction exists in Scottish dialect and standard Scottish English; thus *rice* is **rɜɪs,** but *rise* is **raɪz,** *sight* is **sɜɪt,** but *sigh* is **saɪ;** though here, owing to the law of Scottish "stopped vowels," the **ɜɪ** form is used not only before voiceless consonants, but also before voiced stops (*tide* is **tɜɪd**).[35] In Scottish as in the South and Canada a distinction is made between the singular *wife* **wɜɪf** and the plural *wives* **waɪvz,** though analogy is apt to make them alike (**wɜɪf, wɜɪvz**). Nouns of this kind occurring more commonly in the plural would probably generalize the **aɪ** form. The Virginian and Canadian pronunciation is perhaps connected historically with the Scottish one. For a similar distinction in the **aʊ** diphthong, see **aʊ** below, §336.

aʊ

333. (1) Comment on the **aʊ** sound and its spelling in *loud, hour* (§353), *plow* (British *plough*), *slough, sauerkraut, flower* (§353), *flour, doubt, accompt, MacLeod, bough, bought, through, though, borough, hough, tough, cough.*

334. The sound **aʊ** is more easily recognized as a diphthong because of its frequent spelling with *ou* or *ow*. It developed, however, from a simple vowel in ME just as did **aɪ.** As **aɪ** de-

[34] See E. F. Shewmake, *Mod. Lang. Notes,* December, 1925, p. 491. For information about the Canadian pronunciation, I am indebted to Professor Gordon C. Patterson, University of Toronto.

[35] See Webster, *Pron.* §199, third paragraph; Heinrich Mutschmann, *A Phonology of the North-Eastern Scotch Dialect,* Bonn, 1909, pp. 14 ff.; James A. H. Murray, *Dialect of the Southern Counties of Scotland, Trans. Philol. Soc.,* London, 1873; Grant, p. 63; and Eugen Dieth, *A Grammar of the Buchan Dialect (Aberdeenshire),* Cambridge, 1932, §65.

veloped from the long high-front **iː**, so **au** developed from the long high-back-rounded ME **uː** through the probable stages **uu**, **ou**, **ɜu**, **au**. The fact that this was spelt *ou* in ME gives us the same spelling today. If it were not that French scribes introduced into ME the digraph spelling *ou* for the then simple sound **uː**, we should probably today be spelling the diphthong **au** with the letter *u*, just as we spell the diphthong **ai** with the letter *i*.

335. The quality of the **au** sound varies somewhat as does that of **ai**. The standard American and British form is **au**. Many Americans use the form **ɑu**, but **ai**. The *Oxford Dictionary* writes **ɑu** without defining the first element. A form with the first element approaching or reaching **æ** is widespread in both British and American dialects. **æu** is a frequent form heard in British local dialect, and it has been one of the conventional marks of "Yankee" dialect. Either **æu** or **ɛu** is probably what Lowell meant in the *Biglow Papers* by the spelling *neow* for *now*. A sound **æu**, or a diphthong with first element so much nearer **æ** than **a** that it is noticeable to those who use **au**, is a characteristic of Southern American cultivated speech, and is often heard from educated British speakers.

As with **ei**, **ou**, and **ai**, the tongue usually does not reach the full position for **u** in the diphthong **au**. See §293, end.

336. There is a distinction in the **au** diphthong before voiceless consonants and before voiced consonants and finally that corresponds to that of **ai** (§332). In the main it is found in the same regions, but in the South seems to be more widespread. In the Carolinas and Virginia, and in Canada, the sound is **au**, or in the South often **æu**, before voiced consonants and finally; as *ground* **graund**, **græund**; *bowed* **baud**, **bæud**; *how* **hau**, **hæu**; *bow* **bau**, **bæu**. Before voiceless consonants, the sound varies, being **ɜu**, **ʌu**, and **ou**, sometimes **uu**. The **ou** form is common in Canada. Thus in Toronto the singular of *house* **hous** is dis-

tinguished from the plural *houses* **hauzɪz.** The author has found this distinction widespread in Virginia, particularly central and southwestern; and it is recorded in Eastern Virginia (§332, n. 34). In Monterey were heard **kauntɪ, hauzɪz, taun, əbout, hous, æuə, əkæunt,** and in Charlottesville **out, əbout, θæuzənd;** in Staunton (pron. **stæntən**), **əbout, bræun.**

Unlike the distinction between **ɜɪ** and **aɪ,** this is not general in Scottish dialect, where, as a rule the ME **uː** has not changed to **au,** but remains **uː.** A beginning of the development, however, is to be found in Southern Scotland, where in final positions the **uː** has become **ʌu,** remaining **uː** in other positions.[36]

337. The behavior of **aɪ** and **au** before voiceless and voiced consonants and finally is an illustration of the tendency of English long vowels to become diphthongs (see §261). Before voiceless consonants ME **iː** and **uː** were shorter than before voiced and finally (see rules of *Quantity*, §84). In the regions referred to the ME **iː** and **uː** before voiced consonants and finally, being longer, were diphthongized more rapidly and reached the stage reached in standard speech, **aɪ** and **au.** Before voiceless consonants, where they were shorter, they did not diphthongize so rapidly, and have only reached the Early Modern stage **ɜɪ** (for **aɪ**) and **ou,** or **ɜu** (for **au**). See §§330, 334. Though the sound in standard speech is approximately **aɪ** or **au** in all positions, if the student will listen sharply, he will often be able to detect a slight difference in either diphthong according as it is before a voiceless sound or before a voiced or final one.

ɔɪ

338. This diphthong is more easily resolved into two separate elements than **aɪ, au.** The first element is slightly prolonged before changing in the direction of **ɪ,** so that **ɔɪ** does not

[36] See references at note 35, §332.

differ so much from ɔ+ɪ as does aɪ from a+ɪ. Cf. *strawy* **strɔ-ɪ** with *destroy* **dɪˈstrɔɪ**. The first element of ɔɪ in America is generally ɔ, sometimes ɒ. In British cultivated speech there appear to be two types of the diphthong. One is similar to the American sound, with the first element between ɔ and ɒ, as described by Jones (*Phonetics*, §437); the other is described by Sweet (*Sounds of English*, p. 74) and Jespersen (*Gram.* I, §15, 93) as having the first element similar to the lax o in *obey*.

Under what conditions are the different spellings for ɔɪ used?

339. Note the following rimes from Dryden and Pope: *design: join; find: joined; lie: joy; wild: spoild: smiles: toils: mind: purloined;* and the lines from Gray:

> Let not Ambition mock their useful *toil*,
> . . . . . .
> Nor Grandeur hear with a disdainful *smile*.

The rimes show identity or similarity of the vowels in *toil*, *smile*, but they do not show what the vowel was. Both differed from the present sound, but not greatly. The somewhat complicated facts may be approximately stated in the following way. Three different sounds are involved in the history:

1. ME ɔɪ (*voice* **vɔɪs**) became Early Modern ɑɪ (**vɑɪs**), and then became present English ɔɪ (**vɔɪs**). This sound was spelt *oi*, as today.

2. ME ʊɪ (*point* **pʊɪnt**) became EM ɜɪ (**pɜɪnt**), and then became PE dialectal aɪ (**paɪnt**). This different sound was also spelt *oi*, as now in the same words.[37]

3. ME iː (*ride* **riːdə**) became EM ɜɪ (**rɜɪd**), and then became PE aɪ (**raɪd**). This was and is spelt *i*.

Observe, first, that No. 2 (**pʊɪnt**) and No. 3 (**riːdə**) became alike ɜɪ in Early Modern (**pɜɪnt, rɜɪd**). In dialect they are still

[37] Since in ME *o* was often used to spell ʊ, as in *love* **lʊvə**, now **lʌv**, *oi* was likewise used to spell ʊɪ.

alike, now **aɪ** (**paɪnt, raɪd**). Observe, secondly, that No. 1 (*voice*) and No. 2 (*point*) are *spelt* alike. Hence, among the educated, spelling-pronunciation changed the sound of all No. 2 words like **pʊɪnt** to **ɔɪ** (**pɔɪnt**), like the *oi* words in No. 1. Thus spelling brought together the sounds of Nos. 1 and 2 into **ɔɪ** (*voice, point*), and ignorance of spelling among the illiterate kept together the sounds of Nos. 2 and 3 from EM **pɜɪnt, rɜɪd** to PE dialect **aɪ** (**paɪnt, raɪd**). That is why the illiterate or partly literate still often say "*pint*" **paɪnt** for *point* (cf. "*pimeblank*," §102), "*bile*" **baɪl** for *to boil*, "*jine*" **dʒaɪn** for *join*, "*jint*" **dʒaɪnt** for *joint*, "*ile*" **aɪl** for *oil*, etc.

340. The words *joist, hoist, boil* ("ulcer"), *groin* originally belonged to group No. 3 (ME *jiste, hyce, bile, grine*), but in Early Modern, being sounded with **ɜɪ** like **pɜɪnt,** they were often spelt *oi* like *point* and other words in No. 2. (Cf. *reverse spelling*, §154 (2).) Hence by spelling-pronunciation the educated learned to pronounce them **dʒɔɪst, hɔɪst, bɔɪl, grɔɪn.** But the illiterate or partly literate continue to say **dʒaɪs(t), haɪst, baɪl, graɪn.** In fact, **haɪst** in general rural usage is a different word from **hɔɪst,**[38] with a specialized meaning. Historically, **haɪst, dʒaɪst, baɪl, graɪn** are correct. Shakespeare has only *byle*, and in Job (1611) we find, "He smiteth him with sore *boiles*." "Satan . . . smote Iob with sore *biles*."

ɪu, ju

341. These diphthongs are found in American pronunciation in such words as *beauty, feud, view, tune, cure, suit, mule, new*, etc. The Early Modern sound in such words was a diphthong that may be represented by **ɪu.** It had many slight variations, as the corresponding sound still has. Only the main lines of development can here be given. This Early Modern **ɪu** was at first a falling diphthong **ˈɪu,** accented on the first element **ɪ.**

[38] Cf. §250 (4).

In one important type of pronunciation the stress soon shifted to the second element, making a rising diphthong that may be represented by **jˈu.** This, with some varieties, including simple **u** derived from **jˈu,** is regarded as prevalent in standard British and in parts of America. Another variety kept the falling diphthong with initial accent (**ˈɪu**), often with the second element longer (as observed by Grandgent), and a third distributed the accent evenly over the two elements. The last two varieties are still current in America.

342. Murray, in the *Oxford*, evidently recognized varieties of the sound. He represented it by the symbol iu (with diacritics for variations), but distinguished, e.g., the **ju** sound in *misused*, which he marked misyūzd, from the sound in *abused*, marked abiūzd (Webster, *Pron.* §241). It is certain that the **j** element is more obvious when **ju** (see §§344 f.) begins a syllable, as in *misused* **mɪs-juzd,** *statue* **stæt-ju,** than when after a consonant in the same syllable, as in *abused* **əˈbɪuzd, əbˈjuzd.** Compare *Jacob used it* **dʒekəb juzd ɪt** with *Jake abused it* **dʒek əbɪuzd ɪt.** Even if the last is pronounced **dʒek əbjuzd ɪt,** the **j** is not so clearly consonantal as in *used* **juzd.**

343. The author's pronunciation **ɪu** is usually given in this book, together with the other main type (**ju** or **u**), minor variations being in the main disregarded. The two types have long been recognized (Ellis, Whitney, Jespersen, Grandgent). But the usual conventional representation of the type "with the *y* sound" (i.e., **ju**) as the only "correct" one, obscured the facts in American pronunciation till Grandgent demonstrated the existence of both types in cultivated American speech.[39]

344. In the author's pronunciation the vowel sound in words like *few, new, mute, duty, cure, suit, stew* is a diphthong **ɪu** with retracted **ɪ** and advanced **u** (see Figure 9, p. 66). In some cases the two elements are still closer together, so that the sound

[39] *Mod. Lang. Notes*, VI, pp. 466 ff. (1891).

might be represented by **ʉu+**, there being only a slight glide from the first to the second element, both of which are advanced toward the central position. The **ʉu+** type is more apt to occur after **r**, as in *rude, true*. In the **ɪʉ** type either the stress is on the **ɪ** with a longer **ʉ**, or it is about even on both. The stress is never wholly on the second element of **ɪʉ** or **ʉu+**.[40]

345. In the other type (the **ju-ʉ** type) the **ʉ** is also advanced owing to the fronting influence of the **j**, so that **jʉ** fairly well represents it. Even in cases in which the **j** is not sounded (as in *rude, true, lute*) the effect of a former **ɪ** or **j** sound is usually heard in the advanced character of the **ʉ**; so they may be written **rʉl, trʉ, lʉt.** In so transcribing these pronunciations, it is to be understood that the amount of fronting of the **ʉ** varies.[41]

346. The retraction of the **ɪ**, and the advancing of the **ʉ**, the indistinct border line between the vowel **ɪ** and the consonant **j**, the varying stress on this diphthong, and the mixture of speech habits of different regions, all combine to make the observation of this sound difficult, and also contribute to variation in current usage. Certain tendencies, however, can be observed in the different groups of words containing this sound. Since in the **jʉ** type **jʉ** is often replaced by **ʉ** after certain consonants, usage varies among the three sounds **ɪʉ, jʉ, ʉ.**

347. The noteworthy fact about the **ɪʉ** type is that it varies only slightly according to the consonant that precedes it. It or

[40] See Martin Joos's interesting comments on the various American types of this diphthong in *Le Maître Phonétique*, Jan.–Mars, 1934, pp. 3–6, noting his remark, "many other things also happen, too numerous to mention." Joos's statement that the **ɪü** variety (which I take to be my **ɪʉ**) is principally found in Ohio and a strip from the Ohio River east to New Jersey, and settlements therefrom, seems a little surprising in view of the fact that my Western Reserve speech shows in other respects all the features that characterized the line of "Yankee" migration across New York State to northern Ohio and Indiana, and differs markedly from the speech of central Ohio, Pennsylvania, and New Jersey.

[41] Webster, *Pron.* §§241 ff.

a near variety (still diphthongal) is used (except initially) not only in the words in which the **ju** type occurs, as *beauty*, *mute*, *feud*, etc., but also in words in which the **ju** is replaced by **u**, as *rule* **rɪul**, or **ruul**, *true* **trɪu**, or **truu**, *lute* **lɪut**, *blue* **blɪu**, as contrasted with the other type **rul**, **tru**, **lut**, **blu**.

348. The following classes of words are to be considered.

(1) Words in which the diphthong is initial; as *yew*, *you*, *youth*, *yule*, *ewe*, *union*, *use*, *Europe*, *unite*. In the initial position **ɪu** is not found; such words always begin with the **j** sound whether it is spelt (*yew*) or not (*use*): **ju**, **juθ**, **jul**, **ju**, **junjən**, **juz**, **juɚəp**, **juˈnaɪt**. In these words, however, in addition to the usual fronting of the **u**, there is often also an **ɪ** glide after the palatal **j**; so that pronunciations like **jɪuz**, **jɪunjən** are not uncommon.

The same law holds when the diphthong is initial in the syllable, though not in the word; as in *deluge* **ˈdɛl-judʒ**, *value* **ˈvæl-ju**, *statue* **ˈstæt-ju** (or **ˈstætʃu**), *continue* **kənˈtɪn-ju** (cf. **ˌkɑntɪˈnɪuətɪ**), *regular* **rɛg-jʊlɚ**, *salutation* **ˌsæl-juˈteʃən** (cf. **səˈlɪut**), *cherubim* **tʃɛɚ-jʊbɪm**, *reputation* **ˌrɛp-juˈteʃən** (cf. *repute* **rɪˈpɪut**), etc.

(2) Words in which the diphthong follows consonants that do not use the forward part of the tongue in their formation (**p**, **b**, **k**, **g**, **f**, **v**, **m**, **h**, **hw**). In these words the current pronunciation is either **ɪu** or **ju**: — **p**: *dispute* **dɪspɪut**, **dɪspjut**; *pew* **pɪu**, **pju**; so *pewter*, *pugilist*, *puny*, *pupil*, *pure*, *repudiate*, *repute*, *spew;* **b**: *abuse* **əbɪuz**, **əbjuz**, *beauty*, *bugle*, *bureau*, *imbue;* **k**: *accumulate* **əˈkɪumjəlet**, **əkjumjəlet**, *accuse*, *acute*, *cube*, *cue*, *culinary*, *Cupid*, *cure*, *curious*, *obscure*, *pecuniary;* **g**: *gules* **gɪulz**, **gjulz**, *gubernatorial*, *legume*, *lugubrious;* **f**: *feud* **fɪud**, **fjud**, *feudal*, *few*, *fugue*, *fume*, *funeral*, *fury*, *fuse*, *fusion*, *future*, *reˈfuse*, *refute;* **v**: *view* **vɪu**, **vju**; **m**: *amuse* **əmɪuz**, **əmjuz**, *demure*, *immune*, *mew*, *mucus*, *mule*, *mural*, *music*, *mute*, *mutilate*, *mutual;* **h**: *hew* **hɪu**, **hju**, *Hubert*, *hue*, *huge*, *Hugh*, *human*, *Hume*, *humor* **hɪumɚ**, **hjumɚ**, **hçɪumɚ**, **hçumɚ**, **jɪumɚ**, **jumɚ**. (Do you note any differ-

ent meanings in the different pronunciations of *humor?* Cf. §250 (4)); **hw:** *whew* **hwɪʉ, hwçʉ** (with voiceless **w** and **ʉ**).

In these words **ʉ** is rarely if ever used. So there is no confusion between *beauty* and *booty* **butɪ,** *cue* and *coo, feud* and *food, hue* and *who, mute* and *moot, pew* and *pooh, pure* and *poor.*

(3) Words in which the diphthong follows consonants that use the forward part of the tongue, which is used also in forming **j,** and in which there is more or less hindrance to forming the **j** sound (least in **t, d, θ, n,** and most in **l, r**). These consonants are: **t, d, θ, n, s, z, ʃ, ʒ, tʃ, dʒ, l, r.**

(a) The **ɪʉ** speakers regularly use some variety of **ɪʉ** distinct from **jʉ** or **ʉ** in these words: *tune* **tɪʉn,** *duke* **dɪʉk,** *enthusiast* **ɛnˈθɪʉzɪæst,** *suit* **sɪʉt,** *resume* **rɪˈzɪʉm,** *issue* **ˈɪʃɪʉ,** *luxurious* **lʌgˈʒɪʉrɪəs,** *chew* **tʃɪʉ,** *juice* **dʒɪʉs,** *new* **nɪʉ,** *lute* **lɪʉt,** *blue* **blɪʉ,** *rule* **rɪʉl, rʉul,** *true* **trɪʉ, trʉu.** These speakers regularly distinguish in sound between *brewed* **brɪʉd**—*brood* **brud,** *chews*—*choose, due*—*do, duly*—*Dooley, lute*—*loot, rheum*—*room, rumor*—*roomer, suit*—*soot, sue*—*Sioux, tutor*—*tooter,* etc.[42]

(b) **i.** Among the **jʉ-ʉ** speakers, after **t** (*tune*), **d** (*duke*), **s** (*suit*), **z** (*presume*), the earlier **jʉ** sound tended to become palatalized (see §§195 (3), 198 (2), 208 (3), 211 (3)). Thus **t** became **tʃ, d** became **dʒ, s** became **ʃ,** and **z** became **ʒ,** giving the pronunciations "*chune*" **tʃʉn,** "*juke*" **dʒʉk,** "*shute*" **ʃʉt,** "*preˈzhoom*" **prɪˈʒʉm,** which are occasionally now heard in British dialect. The reaction from these pronunciations by a part of the **jʉ-ʉ** speakers was to **tʉn, dʉk, sʉt, prɪˈzʉm.** The pronunciations **tjʉn, djʉk, njʉ,** and so in other words with initial **t, d, n,** are still regular in England, but in America the **jʉ-ʉ** speakers are increasingly saying **tʉn, dʉk, nʉ,** etc., and both in England and America the **ʉ** is heard after **s, z,** and **θ** (**sʉt, prɪˈzʉm, ɛnˈθʉzɪæzəm**).

ii. After **l,** usage of the **jʉ-ʉ** speakers is divided. In words

[42] Webster, *Pron.* §242.

like *lute*, in which **l** is not preceded by a consonant in the same syllable, the more usual pronunciation is with **ʉ** (**lʉt**), but **jʉ** (**ljʉt**) is sometimes heard. It is somewhat difficult to pronounce a full consonantal **j** after **l** in the same syllable, though it is easier when **l** is in the preceding syllable, as in *resolute* **ˈrɛzl̩-ˌjʉt**, and **jʉ** is thus initial in the syllable (see (1) above.) When a consonant precedes **l** in the same syllable, as in *blue*, the **j** sound has generally been abandoned (if it was ever present). These speakers therefore say **blʉ**.

iii. After **r** the **jʉ-ʉ** speakers omit the **j**, as in *rude* **rʉd**, *rheum* **rʉm**. But here also if **r** is in a preceding syllable, and the **jʉ** therefore initial in the syllable, the **jʉ** is used both by **ɪʉ** and **jʉ** speakers; as in *virulent* **vɪɚ-jʉlənt**, *garrulous* **gæɚ-jʉləs**. But after **r** there is a tendency to drop even initial **j** (**vɪɚʉlənt**, **gæɚʉləs**, **gæɚələs**). For further examples, see Webster, *Pron.* §249.

iv. After **tʃ** and **dʒ** sounds (*chew*, *juice*) the **j** is usually absorbed in the preceding palatal and hence the **jʉ-ʉ** speakers pronounce **tʃʉ**, **dʒʉs**, though here also (see (1), above) the palatal glide **ɪ** is not uncommon (**tʃɪʉ**, **dʒɪʉs**).

v. After **n** the usage of the **jʉ-ʉ** speakers is divided, some using the pronunciations **njʉ**, **njʉz**, **njʉməs**, and others **nʉ**, **nʉz**, **nʉməs**. The forms without **j** appear to be increasing in America.

349. Following are some of the words to which the statements in **3**, (**a**), (**b**) apply: **t**: *constitution*, *contusion*, *mature*, *stew*, *steward*, *student*, *stupid*, *Teuton*, *tube*, *Tuesday*, *tulip*, *tumor*, *tune*, *tutor;* **d**: *adieu*, *credulity*, *deuce*, *dew*, *dubious*, *dude*, *duly*, *dupe*, *duty*, *endure;* **θ**: *enthusiast*, *Malthusian*, *thews*, *Thucydides*, *Thule;* **s**: *assume*, *pseudonym*, *sewer*, *sue*, *suet*, *suicide*, *suit*, *super-*, *Susan;* **z**: *presume*, *resume*, *Zeus*, *Zürich* **zɪʉrɪk**, **zjʉrɪk**; **ʃ**: *chute*, *issue*, *Shunammite;* **ʒ**: *luxurious;* **tʃ**: *chew*, *fitchew*, *virtue;* **dʒ**: *abjure*, *Jew*, *jewel*, *Julia*, *July*, *June*, *jury;*

n: *knew, neurotic, neuter, new, newt, Newton, nude, nuisance, numerous;* **l:** *absolute, absolution, allude, blew, blue, clew, conclude, glue, lewd, lieu, Lucian, lucid, Lucy, luminous, lunatic, lure, lurid, lute, revolution, salute, slew, sluice, solution;* **r:** *brew, bruise, bruit, brute, crew, crucify, crude, cruel, cruise, drew, fruit, garrulity, intrude, peruse, rheum, ruby, rude, rudiment, rue, ruin, rule, rumor, rural, screw, scrutiny, shrew, threw, truce, true, truth.*

350. It is generally true, as Joos has pointed out,[43] that intelligent speakers who have inherited historical distinctions in sound between similar words, as between *chews—choose, due—do, tutor—tooter,* feel a natural desire to maintain it against what seems to them unwarranted carelessness and confusion of pronunciation. Lowell in the *Biglow Papers* brought against this tendency the force of his humorous sarcasm regarding such pronunciations as "*dooty*" for *duty,* "*loot*" for *lute,* etc. The same statement applies to the distinction between words like *hoarse—horse, worn—warn, mourning—morning,* etc., still maintained in America and England against an increasing tendency to confuse them.[44]

351. In certain local dialects, in America, particularly in New England, the **ɪu** sound has been extended to words that originally had only **u,** as *two* **tɪu,** *do* **dɪu,** *smooth* **smɪuð,** etc. (Certain Scottish dialects have made a similar change in the **u** sound, as in *moor* **mjur,** *book* **bjuk,** etc.) This has become somewhat general in the word *shoe* **ʃɪu,** perhaps owing to the palatal **ʃ.** In the word *choose,* on the other hand, a historical pronunciation (probably also due to the palatal **tʃ**) goes back to a 16th c. form **tʃɪuz,** and was commonly spelt *chuse* till the end of the 18th c. (as in Jane Austen).

[43] *Le Maître Phonétique,* Jan.–Mars, 1934, p. 6.

[44] On the general principle, see Robert Bridges, *Tract on the Present State of English Pronunciation,* Oxford, 1913, and *English Homophones, Soc. for Pure English, Tract* No. 2, Oxford, 1919.

352. Centering Diphthongs: General American has a series of *r* diphthongs quite analogous to the British centering diphthongs, as Palmer has called them.[45] As the British and the Eastern and Southern American centering diphthongs end in the central vowel ə (*fear* **fɪə**, *there* **ðæə, ðɛə**, *for* **fɔ(ə)**, *gourd* **goəd**, *poor* **pʊə**), so the GA centering diphthongs end in the central *r*-colored vowel ɚ. Thus we have the diphthongs **iɚ** (*we're* **wiɚ**), **ɪɚ** (*weir* **wɪɚ**), **ɛɚ** (*very* **vɛɚ-ɪ**), **æɚ** (*there* **ðæɚ**), **ɑɚ** (*far* **fɑɚ**), **ɔɚ** (*for* **fɔɚ**), **oɚ** (*gourd* **goɚd**), **ʊɚ** (*poor* **pʊɚ**). These will be more fully illustrated below, §§356 ff.

353. There are also **centering triphthongs:** as in *fire* **faɪɚ**, *flour* **flaʊɚ**, *pure* **pɪuɚ, pjuɚ**. Triphthongs, however, very easily break up into diphthong+syllabic vowel. Thus words like *fire*, *flour* are often actually pronounced in two syllables, however much they look like one syllable in spelling: **faɪ-ɚ, flaʊ-ɚ**. So, too, words like *fewer*, *newer*, though conventionally regarded as dissyllabic, are in actual speech often perfect rimes to monosyllables: *fewer* **fɪuɚ, fjuɚ**: *pure* **pɪuɚ, pjuɚ**; *newer* **nɪuɚ, njuɚ**: *cure* **kɪuɚ, kjuɚ**, etc. This wavering between monosyllable and dissyllable has been freely made use of by poets, as shown by both rimes and the verse rhythm. Note the rimes: *briar: fire* (B. Jonson); *higher: fire; tower: hour* (Shelley); *power: hour* (Shakespeare). Note the difference in the rhythm of the word *power* in the following from Milton:

(Dissyllabic) Whose ˈ*pow-er* ˈhath a ˈtrue conˈsent—*Il penseroso*, 95.

(Monosyllabic) His ˈutmost ˈ*power* with ˈadverse ˈ*power* opˈposed—*Par. Lost*, I, 103.[46]

354. The same wavering is indicated by present-day monosyllables formerly spelt and treated as dissyllables; as *fire*,

[45] Jones, *Phonetics*, p. 95.

[46] Robert Bridges, *Milton's Prosody*, 1921, pp. 20 f.

formerly *fier, feyer; pure*, formerly *puer; lure*, formerly *lewer; fowl*, formerly *fowel;* and vice versa by dissyllables formerly treated as monosyllables; as *bower*, formerly *bour; shower*, formerly *shour; tower*, formerly *tour*. *Flower* and *flour* are usually pronounced alike. Though now regarded as separate words, they are in fact one word (ME *flour* **fluːr**). See §250 (4).

355. Some other triple combinations such as **aɪə** in words like *trial* **traɪəl**, *quiet* **kwaɪət**, or **aʊə** in words like *towel* **taʊəl**, *vowel* **vaʊəl**, though conventionally regarded as dissyllabic, are in fact often so pronounced as to rime with monosyllables; as *trial* **traɪ(ə)l**: *file* **faɪl**, *vial* **vaɪəl, vaɪl**: *vile* **vaɪl**, or *towel* **taʊ(ə)l**: *foul* **faʊl**, in which 'dark' **l** (§§221 f.) is acoustically very like **əl**.

For the pronunciation of **aɪə** as **aə** and **aɪ**, and of **aʊə** as a sound nearer **ɑə** and **ɑɪ**, see Jones, *Phonetics*, §§414–18 and 430–35. The substitution of **aɪ** or **ɑɪ** for **aʊə** is sometimes heard in America, but cannot be regarded as standard here.

iə

356. This diphthong is rare in American English. Yet in GA it is a separate phoneme from **ɪə**, being acoustically distinct in *we're here* **wiə hɪə**, in which the difference is not due to phonetic surroundings, and is therefore phonemic. It is distinctive in *we're* **wiə** as compared to *weir* **wɪə**. It is also often distinctive in phrases like *see her*, frequently pronounced as one syllable **siə**, as compared with *seer* **sɪə** or *sere* **sɪə**; *fee her* **fiə**, compared with *fear* **fɪə**. But **iə** tends to become **ɪə**, the **i** being lowered by the central vowel **ə**. Only recently have dictionaries shown such words as *here, fear* with a different vowel from *he, fee*. But the sound has long been lowered in English. On the other hand, in Scottish the **i** is still heard in *fear* **fiːr**, with trilled **r**.

ɪə

357. This is the very common diphthong heard where formerly an **i** was followed by consonant **r**, with later diph-

thongization and lowering to **ɪɚ**. This is heard in *beer, bier* **bɪɚ**, *near* **nɪɚ**, *peer, pier* **pɪɚ**, *queer* **kwɪɚ**, etc. When a vowel follows the diphthong in the next syllable or next word, as in *weary, here it is*, the nonsyllabic **ɚ** of **ɪɚ** is considerably shorter: **wɪɚ-ɪ, hɪɚ ɪt ɪz**, but the *r* sound is still **ɚ** rather than **r**. Cf. *hearing* **hɪɚɪŋ** with *earring* **ɪɚ-rɪŋ**. See §377. This diphthong may result from either a former **ir** or an **ɪr**; hence *spear it* and *spirit* are exact homophones (**spɪɚɪt**).

eɚ

358. This diphthong is not frequent in GA. It is found in a few words like *they're*, and is distinctive in *they're there* **ðeɚ ðæɚ, ðɛɚ**. Many Americans pronounce *their* **ðeɚ**, owing, perhaps, in part to Northern British and Scottish pronunciation, and in part to the analogy of *they*. In this pronunciation, **eɚ** is distinctive in *their(s)* **ðeɚ(z)** and *there('s)* **ðæɚ(z)**. When *mayor* is pronounced **meɚ**, in one syllable, as frequently, it is distinct from *mare* **mæɚ**. But the tendency of **eɚ** is to break into two syllables, as *mayor* **me-ɚ**, *payer* **pe-ɚ**, *slayer* **sle-ɚ**, or to become lowered to **ɛɚ, æɚ**. In one pronunciation of *vary, Mary, Carey, Sarah, barbarian*, heard in the South[47] and occasionally elsewhere, in which a vowel follows the diphthong, the **ɚ** is apt to be replaced by **r**; **ve-rɪ, me-rɪ, se-rə, bɑɚbe-rɪən**. Some speakers who do not use all these pronunciations distinguish *very* **vɛɚ-ɪ** from *vary* **ve-rɪ**. See **ɛɚ**.

ɛɚ

359. We may distinguish **ɛɚ** (1) and **ɛɚ** (2). **ɛɚ** (1) represents the sound in GA in words like *very* **vɛɚɪ**, *merry* **mɛɚɪ**, *ferry* **fɛɚɪ**, *Perry* **pɛɚɪ**, *necessary* **nɛsəsɛɚɪ**, *cemetery* **sɛmətɛɚɪ** (and all words in *-ary, -ery*), *querulous* **kwɛɚjuləs**. This diphthong arose either from an originally short **ɛ** before **r**, or from a long **eː** shortened by reduced accent (ˈ*neces*ˌ*sary*).

[47] Read, *Jour. Eng. and Germanic Philol.*, April, 1923, pp. 217–44.

ɛə˞(2), as in *there, care, air*, etc., usually has the ɛ somewhat lower than in ɛə˞(1) (*very*). This arose from an Early Modern long **eː** before **r**. With some American speakers ɛə˞(1) and ɛə˞(2) have fallen together in a part or all of the words concerned.

æə˞

360. Here also we may distinguish æə˞(1) and æə˞(2). æə˞(1) occurs in words with ME short **ɑ+rr+**vowel, which became Early Modern **æ**, as now in *carry* **kæə˞ɪ**, *marry* **mæə˞ɪ**, *Harry* **hæə˞ɪ**, *narrow* **næə˞o**, *sparrow* **spæə˞o**. These words are marked in dictionaries without exception with the equivalent of "short *ă*," *cărry, nărrow*, etc. See §274, I.

361. æə˞(2) arose, like ɛə˞(2), from an Early Modern long **eː** before **r**.[48] It is an alternative pronunciation to ɛə˞(2) in words like *there, care, air*, etc. Its æ is slightly higher than the æ of *man* or of *carry* **kæə˞ɪ**. The variation between the use of ɛə˞(2) and æə˞(2) or their equivalents is widespread both in England and America.[49] æə˞ was once general in New England[50] and is still so in the South. In the author's speech the vowel in *there, fare*, etc., is nearer to æə˞ than to ɛə˞, and is accordingly here written: **ðæə˞, fæə˞**, with the alternative ɛə˞ often added. It is the author's opinion that ɛə˞(2) is on the whole now more fre-

[48] It is possible that æə˞(2) arose from an Early Modern variant of ME **ɑː** and **ɛː** before **r** which did not reach the Early Modern stage **eːr**. The testimony of early American writers to the prevalence of æə˞(2) in New England in words like *care* (ME **ɑː**) and *bear* (ME **ɛː**), and its decreasing use in later times suggests that it may have reached America from a 17th c. **æːr** sound. Its great frequency in England also indicates its age. The later influence of post-vocalic **r** sounds tends to raise low vowels, which would account for the present general tendency toward ɛə˞(2) or ɛə˞(1). Origin in a 17th c. **æːr** seems more likely than in **eːr** later lowered to **ɛːr**, then æə˞, and then back again toward ɛə˞. See Wright, *New English Grammar*, §§119, 122; Luick, *Gram.* §493.

[49] Jones, *Dictionary*, 1924, p. xxii; *Phonetics*, 1932, §449.

[50] Grandgent, *Pub. Mod. Lang. Assoc.*, 1899, pp. 217 f.

quent in GA. Convenient test phrases are *elsewhere, hair-net, spare that, a flat spare, we'll get there yet, that square mat.*

362. There is much vacillation and dialect mixture in the American pronunciation of such words as *there, fare, vary, carry, narrow.* (a) Many speakers of the younger generation have no **æə** sound in any words, not even in *carry, marry,* etc. These latter they pronounce **kɛəɪ, mɛəɪ,** etc. Thus with them *merry, Mary, marry* are all alike **mɛəɪ.** (b) Others keep the **æə** in the "short *ă*" words *carry, marry,* etc., but divide the other words into two groups, with **ɛə** and **æə,** with no difference between **ɛə**(1) and **ɛə**(2) or between **æə**(1) and **æə**(2). For example, the following are the author's pronunciations:[51] *very* **vɛəɪ,** *vary* **vɛəɪ,** *various* **vɛəɪəs,** *variation* **vɛəɪˈeʃən,** *variegate* **vɛəɪget,** *merry* **mɛəɪ,** *Mary* **mɛəɪ,** *marry* **mæəɪ** (and all similar "short *ă*" words), *Marian* **mɛəɪən,** *Marion* **mæəɪən,** personal name, but **mɛəɪən,** Ohio, *ferry* **fɛəɪ,** *fairy* **fæəɪ,** *fair* **fæə** (and all *-air* words), *ere, e'er* **ɛə,** *chary* **tʃæəɪ,** *wary* **wæəɪ,** *beware* **bɪˈwæə,** *care* **kæə** (and all *-are* words), *pear* **pæə** (and all such *-ear* words), *Sarah* **sɛəə,** *Harold* **hæəəld,** *barbarian* **bɑəˈbɛəɪən,** *Hungarian* **hʌŋˈgɛəɪən,** *librarian* **laɪˈbrɛəɪən,** *precarious* **prɪˈkæəɪəs,** *hilarious* **haɪˈlæəɪəs,** *there* **ðæə,** *where* **hwæə** (and all such *-ere* words except *ere,* a book-word), *prayer* **præə,** *prairie* **prɛəɪ.** (c) Others, who have no **æə,** divide the words into **ɛə**(1) *very* **vɛəɪ** and **ɛə**(2) *there* **ðɛə,** with **ɛə**(2) clearly lower than **ɛə**(1). (d) Others are fairly consistent in pronouncing **ɛə**(1) in *very,* **ɛə**(2) in *there,* and **æə**(1) in *carry.*

363. A noteworthy feature of Scottish standard English and dialect is the preservation of Early Modern **eː** before **r** in the whole group of words (*there* **ðeːr,** *care* **keːr,** *air* **eːr,** etc.), except, of course, words like *carry,* which had early Modern **æ.** The

[51] I do not attempt to explain the inconsistencies. Some are almost certainly due to analogy or to spelling. How far they are merely individual, the reader must judge.

same pronunciation **eɪr** was insisted on for English by most dictionaries till the middle of the 19th c. See Webster, *Pron.* §79, fifth paragraph.

ɑɚ

364. This diphthong is found in the three types of words *star* (final *r*) **stɑɚ**, *starry* (intervocal *r*) **stɑɚɪ**, and *farm* (*r*+cons.) **fɑɚm**. It usually remains the same, except for length, when final before a vowel, as in *far away* **fɑɚ əˈwe**. Though in distinct pronunciation this may become **fɑ rəˈwe**, this is rare in normal GA. See §377.

365. In *sergeant* **sɑɚdʒənt** the sound **ɑɚ** is represented by the spelling *er*. Note also the British pronunciation of *clerk* **klɑːk**, and the name *Clark*, which is the same word spelt as it sounds. A large number of words in Middle English spelt with *er*, such as *clerk*, *sergeant*, *smert*, *sterve*, and at first pronounced **klɛrk** (with **ɛ** as in *very*, not as in *person*), **sɛrdʒɛant, smɛrt, stɛrvə**, gradually lowered the **ɛ** to **æ** and then retracted it to **ɑ**, so that these words are now **klɑɚk** (the name), **sɑɚdʒənt, smɑɚt, stɑɚv**. Other examples in ME are *ferre*, *herte*, *herth*, *kerve*, *sterre*, all spelt with *er* and pronounced with **ɛr**, since changed to **ɑɚ**: **fɑɚ, hɑɚt, hɑɚθ, kɑɚv, stɑɚ**. Nearly all this group of words have also changed their spelling to *ar*, though a few older spellings remain in *sergeant*, *heart*, *hearth*. Some of them, however, changed the sound **ɛr** to **ɝ** instead of **ɑɚ** and kept the spelling *er* (*ear*), as *sermon* **sɝmən**, *certain* **sɝtɪn**, *learn* **lɝn**. In 16th–18th c. English, however, many of these latter had **ær**: note the rimes from Dryden and Pope: *art: desert; guard: heard; starve: reserve; remarks: Barks* (=*Berkshire*). Many of these words have now also changed to **ɝ**, owing, perhaps, to the influence of the spelling and to some other causes, such as the varying length of the vowel in many words. Observe that both sounds **ɝ** and **ɑɚ** are different from the original **ɛr** sound, as in *very* (not as in *her*). But because many of these words also changed their spelling to

ar (*star, smart*, etc.), the spelling *er* came to be associated with those that changed in sound to ɜ. Hence *er* exerted an influence by spelling-pronunciation, and many words varied in pronunciation between the sound of *star* and that of *her*, as some still do. But the older pronunciation may still be heard in dialect and in names; as *"sartin"* for *certain*, *"sarmon"* for *sermon*, *"sarvant"* for *servant*, *"varmint"* for *vermin*, *"varsity"* for *university*, *"tarnal"* for *eternal;* the name *Kerr* (often pronounced **kɑɚ**), which is the same as *Carr; Carnahan*, the same name as *Kernohan; Barkly, Barclay*, the same as *Berkley; Clark*, the same as *clerk*,[52] *Larned=learned; Marcy=mercy*. The word *parson* is merely another pronunciation of *person*.[53] Americans often criticize the English for pronouncing *clerk* **klɑːk** or *Derby* **dɑːbɪ**. "What reason," they say, "can there be for pronouncing *e* as **ɑ**?" The answer is, exactly the same reason as for pronouncing *star* **stɑɚ**, *heart* **hɑɚt**, or *starve* **stɑɚv**; namely, they have been so pronounced for generations by large numbers of cultivated people, regardless of the spelling. The accident that the spelling has been changed to suit the pronunciation in *star* and not in *Derby* is of no consequence. *Starve* is not pronounced **stɑɚv** because it is spelt with *ar*, for **the new pronunciation was established long before the spelling was changed from** *er* **to** *ar*. In point of fact, the sound **ɑɚ** for the spelling *er* is no less reasonable than is the sound **ɜ**, for both are normal phonetic developments from the sound **ɛr** which the spelling *er* formerly represented.

ɔɚ

366. This diphthong is found in words like *border* **bɔɚdə**, *born* **bɔɚn**, *morning* **mɔɚnɪŋ**, *horse* **hɔɚs**, *for* **fɔɚ**, etc. It originated

[52] In the town records of colonial New England the word *clerk* is often spelt *clark, clarke*, showing its early American pronunciation.

[53] In *person, parson*, however, the two pronunciations and meanings appear considerably earlier than in most words. Cf. also *darn* **dɑɚn, dɜn**.

in a ME short *o* **ɒ** before **r** final, or **r**+a consonant. In Early Modern it changed from ME **ɒr**, through the stage **ɑːr**, to **ɔr**, present American **ɔɚ**. For the interchange with **oɚ**, see **oɚ**. For the sound **ɔɚ** followed by a vowel in words like *sorry* **sɔɚɪ**, etc., see above at **ɔ**, §291 (1).

oɚ

367. This diphthong is found in words like *boarder* **boɚdɚ**, *borne* **boɚn**, *mourning* **moɚnɪŋ**, *hoarse* **hoɚs**, *four* **foɚ**, etc. It originated in a ME long **ɔː** before **r** final (*boor* **bɔːr**), **r**+a consonant (*hoors* **hɔːrs** "hoarse"), or **r**+a vowel (*boren* **bɔːrən**); also from ME **uːr**+a consonant (*mournen* **muːrnən**), and from ME **oːr** (*floor* **floːr**). In the last two groups modern pronunciation fluctuates somewhat between the sounds **oɚ** and **uɚ**, as in *Moore* **moɚ**, **muɚ**, the same word as *moor*, also spelt *More*. Cf. also the dialectal (?) "*of course*" **əv kuɚs**, for **əv koɚs**, and *poor*, GA **puɚ** beside Southern **puə**, **poə** (dial. **po**) and British **puə**, **poə**, **pɔ(ə)**.

368. A large group of words in which an *o* sound is followed by **ɚ** show a variation in cultivated usage between **ɔɚ** and **oɚ**. In the first group, derived from ME short *o* **ɒ**+**r**, usage is fairly uniform in both England and America with **ɔɚ** or **ɔ(ə)**.

I. (1) *Accord, border, chord, cord, lord, order, re*ˈ*cord;* (2) *dormer, form, normal, storm;* (3) *adorn, born, corn, horn, morn, scorn;* (4) *cork, fork, stork, York;* (5) *exhort, fortify, fortune, forty, important, mortar, resort, short, snort, sort;* (6) *corse, gorse, horse, remorse;* (8) *corpse, for, forfeit, forward, nor, north, or, torch, George, gorge.*

But in the words of the following group, derived from the ME long vowel (**ɔː**, **oː**, or **uː**)+**r**, usage varies:

II. (1) *Afford, board, boarder, ford, gourd, hoard, horde, sword, toward;* (2) *court, courtier, fort, fourteen, port, deport, import* (etc.), *sport;* (3) *forth, fourth;* (4) *coarse, course, divorce, force, hoarse, resource, source;* (5) *borne, mourn, shorn, sworn,*

torn, worn; (6) *pork, porch;* (7) *adore, before, boar, bore, chore, core, door, floor, fore, four, glory, gore, hoary, ignore, implore, more, oar, ore, pore, pour, porous, restore, roar, score, shore, snore, soar, sore, spore, store, story, swore, tore, wore, yore.*

In South England, and by many speakers in Eastern New England and New York City and vicinity, these words are pronounced with the ɔ sound of the word *all.* But by the majority of Americans elsewhere, by most Canadians, and also by the cultivated classes in Midland and Northern England and in Scotland, the words in Group II are pronounced with **oɚ, oə, or.** Hence by these speakers the following pairs of words are not confused in pronunciation: *border* **bɔɚdɚ**—*boarder* **boɚdɚ**; *born* **bɔɚn**—*borne* **boɚn**; *cord* **kɔɚd**—*cored* **koɚd**; *corse* **kɔɚs**—*coarse, course* **koɚs**; *for* **fɔɚ**—*four* **foɚ**; *horse* **hɔɚs**—*hoarse* **hoɚs**; *Laura* **lɔɚə**—*Lora* **loɚə**; *morn* **mɔɚn**—*mourn* **moɚn**; *morning* **mɔɚnɪŋ**—*mourning* **moɚnɪŋ**; *or* **ɔɚ**—*oar, ore* **oɚ**; *rawer* **rɔɚ**—*roar* **roɚ**; *sawer, saw her* **sɔɚ**—*sore* **soɚ**; *therefor* **ðæɚˈfɔɚ**—*therefore* **ˈðæɚfoɚ**; *war* **wɔɚ**—*wore* **woɚ**; *warn* **wɔɚn**—*worn* **woɚn.**

The following phrases may be used as tests: *forestall, foregone, warworn, before dawn, before long, short sport, all four, all the more, hall door, north door, tall story, forty-four, four-forty, more horses, restore order, short oar, hall dormer, small horse, all normal, fall storm, corn-law.*

369. I have no hesitation in designating the distinction of vowel between *mourning* and *morning* as prevailing American pronunciation. It is true, of course, that the quality of the **o** in **oɚ** is not identical with that in *note* **not,** *know* **no**(**ʊ**). The **o** is somewhat lowered by the ɚ and in narrower transcription may be expressed by the symbols **ǫɚ.** This transcription is not necessary as a rule, however, for **oɚ** and **ǫɚ** belong to the same phoneme, different from **ɔɚ** in *morning.*[54]

[54] See G. W. Gray, *Le Maître Phonétique,* Avril–Juin, 1934, p. 49; Grandgent, *Pub. Mod. Lang. Assoc.,* 1899, p. 218; *Mod. Lang. Notes,* 1891, p. 462; *Die*

370. Another treatment of these two groups of words is becoming increasingly noticeable. With many speakers of the younger generation the two groups of words have fallen together in sound, but both sorts of words are pronounced with a diphthong that is neither o͡ɚ nor ɔ͡ɚ, but may be indicated by ɒ͡ɚ as an intermediate sound. Their sound is clearly not the sound o͡ɚ heard from the speakers who still maintain the old distinction; but it is equally clear that it is not ɔ͡ɚ with the sound of ɔ as in *all*. Outside of England and Boston or New York City I have heard very few speakers who pronounced *mourning* with the ɔ sound of *awning*.

It was mentioned above that the diphthong o͡ɚ contains a lowered ɒ, but that in distinguishing *mourning* from *morning*, the symbols o͡ɚ and ɔ͡ɚ are correct on phonemic principles. Where the two groups of words are identified, ɒ͡ɚ is a proper and convenient symbol, provided the sound is not ɔ͡ɚ.

371. The tendency to identify the two groups of words is recent both in England and America. The distinction is found in virtually all British local dialects, both north and south. The two British dictionaries that give other standard pronunciations than Southern British (the *Oxford* and Baker) maintain the distinction. How rapidly the loss of the distinction is proceeding

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Neueren Sprachen, II, pp. 449 ff.; and W. A. Read, *Jour. Eng. and Gc. Philol.*, April, 1923, pp. 217–244. If, in the broad transcription of C. K. Thomas (*Le Maître Phonétique*, Avril–Juin, 1933, p. 35), the symbol ɔ represents the same sound in *board* **bɔrd** as in *all* **ɔl**, the loss of the distinction between o͡ɚ and ɔ͡ɚ has extended to Central New York State. Perhaps the intermediate sound ɒ͡ɚ is intended (see below §370). O. F. Emerson in 1891 said that in words like *mourn*, *hoarse*, etc., "the London English ɔə" (i.e., American ɔ͡ɚ) was "never heard in the Ithaca Dialect" (*Dialect Notes*, Vol. I, Part 3). There is little reason to suppose that cultivated speech in Central New York then differed in this particular from the dialect Emerson was investigating.

The consciousness of making a distinction between *mourning* and *morning*, etc., is not a condition of making it. I have repeatedly found individuals who declared they made no distinction, when in fact they did so.

in America we shall know better when the *Linguistic Atlas* is farther along.[55]

372. Some words waver between the two groups not by recent confusion but because they represent alternative earlier forms with long and short vowel. Thus, among speakers who still maintain the distinction, the word *forge* is both **foəˑdʒ** and **fɔəˑdʒ**; *shorn* is **ʃoəˑn** or **ʃɔəˑn**; *worn* is **woəˑn** or **wɔəˑn**. *Born* (Group I) and *borne* (Group II) were at first such a pair with wavering pronunciation, which later developed a distinction of meaning that fixed them in the two groups. *Born* **bɔəˑn** is from ME *borne* **bɒrnə**, with short vowel, becoming regularly present **bɔəˑn**. The other ME form of the past participle was *boren* **bɔːrən**, with long vowel, regularly becoming *bore* **boəˑ**. Cf. Sterne (1769): "to have bore the expence." *Borne* finally replaced the older *bore*, taking the same vowel: **boəˑn**. The spelling *borne*, which in ME represented the short form (now *born* **bɔəˑn**) was later used to spell the long-vowel form (**boəˑn**), the final *-e* being then looked upon as the sign of the "long *o*."[56]

Uəˑ

373. This diphthong occurs in words like *sure* **ʃuəˑ**, *your* **juəˑ**, *you're* **juəˑ**, *poor* **puəˑ**. It arose chiefly from a former **u** before **r**, as in *moor* **muəˑ**, *tour* **tuəˑ**, or from **ɪu** before **r** as in *sure* **ʃuəˑ**, *Europe* **juəˑəp**; not infrequently from a recent **ɪu**+**əˑ**, as in *endure* **ɪnˈduəˑ**, very often heard both in America and England, in place of **ɪnˈdɪuəˑ**, **ɪnˈdjuə**. The sound of the **u** in **uəˑ** is often a trifle higher than **u** in *full*, *good* **gud**, being marked by the *Oxford* as

[55] In a list of some sixty words with an *o* sound+*r* given by Grant, *Pronunciation of English in Scotland*, §§163 ff., with the sound **or**, all but *forge* agree with my pronunciation. This is one of the words with double pronunciation, both **foəˑdʒ** and **fɔəˑdʒ** being common in America. See §372.

[56] The development was complicated. See *Oxford*, *s.v. bear*, v., and Jespersen, *Gram.* I, 13.353.

a sound intermediate in length, and probably in quality, between that of *full* and that of *two* **tuː**.

374. The lowering effect of **ɚ** on a preceding **u** appears to be complete, so that the occasional diphthong **uɚ** is not distinctive from **ʊɚ**, as **iɚ** is distinctive from **ɪɚ**; see §356. The diphthongs are alike in *you're sure* **juɚ ʃuɚ**. When *two or* **tu-ɚ** becomes one syllable, as in *two or three*, it is pronounced **tuɚ θri**. *Doer*, **du-ɚ**, *bluer* **blu-ɚ**, *truer* **tru-ɚ** are usually dissyllabic; when they are monosyllabic, they are **duɚ**, **bluɚ**, **truɚ**. The last part of **ɪʉ** is also lowered before **ɚ**; *cure* **kɪʊɚ**, *pure* **pɪʊɚ**, *bluer* **blɪʊɚ**, **bluɚ**, *truer* **trɪʊɚ**, **truɚ**, but this need not always be indicated.

375. In British and occasionally in Eastern American a further lowering before **ə** reaches the stage **oə**, and even **ɔ(ə)**; as *poor* **poə**, **pɔ(ə)**, *pure* **pjoə**, **pjɔ(ə)**, *your* **joə**, **jɔ(ə)**, *sure* **ʃoə**, **ʃɔ(ə)**; but not in *doer*, *bluer*, *truer*, owing to the analogy of *do*, *blue*, *true*. Some are lowered only to **oə**, as *boor* **buə**, **boə** (thus one British pronunciation of *boor* **boə** is like one American pronunciation of *bore* **boə**, while *bore* in Southern British is **bɔ(ə)**). With the lowering of **u**+**r** is to be compared that of **ir** to **ɪɚ**, **er** to **ɛɚ**, and **or** to **ɔɚ**; see these sounds.[57] In Southern America **uə** is often lowered to **oə** in *poor* **poə**, *sure* **ʃoə**, and the like. In substandard Southern they often become **poːɪ**, **ʃoːɪ**.

376. As a result of these changes, together with the loss of the *r* sound, the following words and phrases are homophones in Southern British, and to some extent in Eastern American. The GA pronunciations are also given for comparison: GA *cored* **koɚd**, *cord* **kɔɚd**, *cawed* **kɔd**—Brit. **kɔd**; GA *floor* **floɚ**, *flaw* **flɔ**—Brit. **flɔ**; GA *gored* **goɚd**, *gaud* **gɔd**—Brit. **gɔd**; GA *lore* **loɚ**, *law* **lɔ**—Brit. **lɔ**; GA *mourn* **moɚn**, *morn* **mɔɚn**, *Maughan* **mɔn**—Brit. **mɔn**; GA *oar* **oɚ**, *or* **ɔɚ**, *awe* **ɔ**—Brit. **ɔ**; GA *orphan* **ɔɚfən**, *often* **ɔfən**—Brit. **ɔfən**; GA *shore* **ʃoɚ**, *sure* **ʃuɚ**, *Shaw* **ʃɔ**—Brit. **ʃɔ**;

[57] See Webster, *Pron.* §199; Jones, *Phonetics*, §§459, 466.

GA *wore* **wo˞**, *war* **wɔ˞**, *Waugh* **wɔ**—Brit. **wɔ**; GA *yore* **jo˞**, *your* **ju˞**, *yaw* **jɔ**—Brit. **jɔ**; GA *bored and sawed* **bo˞d n̩ sɔd**, *Borden soared* **bɔ˞dn̩ so˞d**, *board and sword* **bo˞d n̩ so˞d**—Brit. **bɔdn̩ sɔd**; GA *roared and pawed* **ro˞d n̩ pɔd**, *Rawdon poured* **rɔdn̩ po˞d**, *roared and poured* **ro˞d n̩ po˞d**, *Rawdon pawed* **rɔdn̩ pɔd**—Brit. **rɔdn̩ pɔd.** Yet the possibility of these and many other such homophones creates no real difficulty among those who so pronounce. See §32, n. 12.

377. In words like *very* **vɛəɹ**, *spirit* **spɪəɹɪt** (like *spear it* **spɪəɹ ɪt**) there is room for difference of opinion as to whether the *r* sound (**ɚ** or **r**) should be regarded as forming part of the diphthong **ɪə** or as a consonantal **r** beginning the following syllable: **vɛ-rɪ, spɪ-rɪt,** etc. The following facts point to the choice (in the author's pronunciation) of **vɛəɹ, spɪəɹɪt** rather than **vɛrɪ, spɪrɪt.**

1. When the *r* sound ends the word and nothing follows, there is no doubt of the diphthong: *spear* **spɪəɹ**, *fair* **fæəɹ**, *far* **fɑəɹ**, *for* **fɔəɹ**, *four* **foəɹ**, *poor* **pʊəɹ**.

2. When an unaccented vowel follows (in the same word or the next), the syllable division seems to remain after the **ɚ**; *fear it* **fɪəɹ ɪt**, *spear it* **spɪəɹ ɪt**, *spirit* **spɪəɹɪt**, *far away* **fɑəɹ əwe** (in normal speech; it is easy to say **fɑ rəwe** in artificial utterance). It is quite true that here, where the movement of the tongue for **ɚ** is more rapid than in **fɑəɹ**, this rapid movement makes more prominent a consonantal *transition* **r** sound to the next vowel. But the acoustic effect is still that of a diphthong **spɪəɹ-ɪt, fɑəɹ əwe,** rather than **spɪ-rɪt, fɑ-rəwe.** Compare *earring* with *hearing*. In **ɪəɹ-rɪŋ** the **ɚ** of the diphthong **ɪə** and the consonant **r** are separately audible and different. If we substitute *hearing*, we omit the second, the consonantal, **r,** leaving **hɪəɹ-()ɪŋ**; if we omit the vowel **ɚ**, the word would become **hɪ()-rɪŋ.**

3. In at least the majority of the diphthongs **ɪəɹ, eəɹ, ɛəɹ, æəɹ, ɑəɹ, ɔəɹ, oəɹ, ʊəɹ,** the first vowel (**ɪ, ɛ, æ, ʊ**) does not occur by itself accented at the end of a syllable in other positions than before an *r* sound. **ɑ** is also rare there, and **e** and **o,** in just the forms they take in *they're* **ðeəɹ**, *more* **mo̜əɹ** (see §369). Hence such combinations as **ˈspɪ-rɪt, ˈmɛ-rɪt, ˈkæ-rɪ, ˈju-rəp** are not natural (to American English), and this is true to a somewhat less extent of forms like **ˈve-rɪ** (*vary*), **ˈsto-rɪ,** though the latter probably occur.

But when the syllable following the *r* sound is accented, it more easily takes the consonant **r** at its beginning, as in *deride* **dɪˈraɪd**, *erratic* **ɛˈrætɪk**, *Eureka* **juˈrikə**.

4. Analogy with the other diphthongs **aɪ**, **au** points the same way. When a vowel follows, as in *trying* **traɪ-ɪŋ**, *plowing* **plau-ɪŋ**, we do not substitute consonantal **j** or **w** for the non-syllabic vowel **ɪ** or **u** and write **tra-jɪŋ**, **pla-wɪŋ**, although a consonantal transition **j** or **w** can often be heard. So, too, we write **ste(ɪ)-ɪŋ**, **go(u)-ɪŋ**, not **ste-jɪŋ**, **go-wɪŋ**.

5. Transcription is simplified by treating alike **hɪɚ** (*here*), **hɪɚ ɪt ɪz**, **hɪɚ** (*hear*), **hɪɚɪŋ**, **hɪɚ-ɚ**, **hɪɚ ɪt**; **fɑɚ**, **fɑɚ əwe**, **fɑɚ ɔf**, **fɔɚ**, **fɔɚ ɪt**, **fɚ ɛvɚ**, etc., writing the simple word like its derivatives and combinations.

378. It must be admitted that there is much to say on the other side for writing **hɪɚ**, **hɪrɪt**, **fɑɚ**, **fɑrəwe**.[58] In many cases there is real difficulty in deciding whether the syllable division falls before or after, or within, the ɚ or **r**. This is not surprising when we consider the comparatively recent historical change of a once strongly consonantal **r** to a vowel-like consonant or to an actual vowel. And analogy of related forms may interfere with a fixed procedure according to phonetic theory; e.g., in pronunciation we easily divide *starry* as **stɑɚ-ɪ** rather than **stɑ-rɪ** because we say **stɑɚ**, and **ɪgzædʒɚˈeʃən** because of **ɪgˈzædʒɚ-et**; but we say **ˈautˌlɔ-rɪ** because of **ˈautˌlɔ**, and **dʒɪu-rɪ** (*Jewry*) because of *Jew* **dʒɪu**.

So, too, after a diphthong, as in *fiery*, *hiring*, *inquiry*, *dowry*, instead of pronouncing triphthongs **faɪɚ-ɪ**, **haɪɚ-ɪŋ**, **ɪnˈkwaɪɚ-ɪ**, **dauɚ-ɪ**, we are apt to pronounce the *r* sound on the following syllable as a consonant: **faɪ-rɪ**, **haɪ-rɪŋ**, **ɪnˈkwaɪ-rɪ**, **dau-rɪ**; though analogy of **faɪɚ**, **haɪɚ**, etc., may lead to saying **faɪɚ-ɪ**,

[58] Mr. Martin, representing General American in Palmer, Martin, and Blandford (see Bibliography) writes the equivalent of **hɪɚ—hɪ · rɪŋ**, **wɛɚ—wɛ · rɪŋ**, etc., parallel to the British **hɪə—hɪərɪŋ**, etc.

daʊɚ-ɪ, etc. In these last cases we are apt to avoid the triphthong by making an extra syllable: **faɪ-ɚ-ɪ, haɪ-ɚ-ɪŋ, ɪnˈkwaɪ-ɚ-ɪ, daʊ-ɚ-ɪ.**[59]

379. Voiced t. Voiced **t** occurs most commonly between vowels (**pɪt̬ɪ**), sometimes between a vowel and certain of the voiced consonants (**mɔlt̬ɪd, twɛnt̬ɪ**) when it is at the end of an accented syllable before an unaccented one (**bɛt̬-ɚ**), or sometimes, when it is at the beginning of an unaccented one (**mɔlt̬ɪd, twɛnt̬ɪ, ɔlt̬əˈgɛðɚ, wɑnt̬əˈgo**—where there is some doubt which syllable the **t** is pronounced with); and when between unaccented syllables (**dʒɔɪn əs ət̬ ɪˈlɛvən**).

Voiced **t** does not occur (1) at the beginning of syllables initial in the phrase, whether accented (**ˈteb̬, ˈtraɪ**) or unaccented (**təˈde**); nor (2) at the end of syllables final in the phrase, whether accented (**rɪˈpit, ɪgˈzɔlt**) or unaccented (**ˈrɪvɪt, ˈtɪb̬t**); nor (3) at the beginning of accented medial (**mɪlˈtɑnɪk**) or final syllables (**rɪˈtʂn, əbˈten**).

It occurs after nonsyllabic **l** (**mɔlt̬ɪd**) and before syllabic **l̩** (**ræt̬l̩**); after nonsyllabic **n** (**twɛnt̬ɪ, sɛnt̬ɚ**), but not before syllabic **n̩** (**mʌtn̩**), nor before nonsyllabic **l** or **n** (*settler* **sɛtlɚ**, *Putney* **pʌtnɪ**). Cf. *settle her* **sɛt̬l̩ɚ**, with voiced **t**.

Voiced **t** is often described as a single-tap **r**. To American ears the two are quite distinct. Even when the voiced **t** has repeated taps (trilled **t**) it is acoustically distinct from trilled **r**, as in *pottage* **pɒt̬ɪdʒ**, *porridge* **pɒrɪdʒ**.[60]

[59] For much assistance in arriving at conclusions to which I was already strongly inclined, I am indebted to Dr. Bernard Bloch and Mr. Martin Joos, of the *Linguistic Atlas of the United States and Canada*, through correspondence and articles in *Le Maître Phonétique* (cf. Jan.–Mars, and Oct.–Dec., 1934), though I do not attribute to either of them all the views expressed above.

[60] All the examples and statements above are supported by kymograms of the author's speech (occasionally that of others). Some American teachers of speech treat voiced t as a defect to be corrected. In theory this is perhaps desirable, since it is one of those features that impair distinctiveness in speech, like

380. w, j, r. There are other ways of conceiving and classifying **w, j, r** than as glide sounds. For practical purposes, and I am inclined to think also for scientific, the conception of **w, j, r** as movements rather than positions is better. The theory of position only for the speech sound, and of movement for the transition sound, in **w, j, r** leads to absurdities. For example, it leads either to calling them fricatives in which the friction is either inaudible or nondistinctive, or to calling them very short consonants. The fact is, the attempted formation of a **w** with fixed position of the organs unavoidably leads to the pronunciation of a vowel **u**; and so with **j** to a vowel **i**, and with **r** to a vowel **ɜ, ɚ**.

It is a matter of some interest to the author that he and Professor Daniel Jones arrived independently at the same view of **w** and **j** as gliding sounds. This conception is not found in Jones's *Outline of Phonetics*, 1922. It appears in Trofimov and Jones, *The Pronunciation of Russian*, 1923 (cf. §§93, 166, 689), and more fully and definitely stated in Jones, *Outline of Phonetics*, 3d ed., 1932 (§§803 ff., 813 ff.). The author's description was worked out in 1917, and owing to conditions following the war, he did not see the second work till after the publication of the first edition of *American Pronunciation* (1924).

Fuhrken takes Jones's view (*Standard English Speech*, §§72, n. 2, 197), and Miss Ward (*Phonetics of English*, §256). Likewise Miss Armstrong for the French semivowels (*The Phonetics of French*, §339 ff.). This view is, of course, in essence the concept of **w, j, r**+vowel as rising diphthongs, and agrees with the view that all diphthongs are not two vowels but a continuously changing sound beginning with one vowel position and ending

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the loss of distinction between *hoarse* and *horse*, *rumor* and *roomer*, the loss of **r**, of the secondary accent in *dictionary*, etc. Like these losses, also, it chiefly disturbs those to whose speech it is alien. American scholars testify to the wide distribution of voiced **t** in America.

with another. Nor is it inconsistent with the view that **w, j,** and **r** are consonants, while the final elements of **aɪ, au, aɚ** are nonsyllabic vowels, both in function and organic nature. See §71.

381. For a strictly **phonemic transcription of unstressed vowels,** I have not yet discovered any wholly consistent theory. Such a theory presupposes general agreement on the nature of accent, which is obviously not yet reached. For instance, the theory that regards the second syllable of **ˈæksɛnt** as being equally accented with that of **ˈæksənt** will not lead to the same practice in phonemic transcription as the theory which regards that syllable as unaccented in **ˈæksənt,** but partly accented in **ˈæksɛnt.** That consideration seems to decide whether **ə** and **ʌ** belong to the same phoneme in **ˈhɪkəp** and **ˈhɪkʌp** (see *Le Maître Phonétique*, Jan.–Mars, 1935, p. 11, note 1). In my view **ˈhɪkəp** and **ˈhɪkʌp** are differently accented, and so far as these and similar words are concerned, **ə** and **ʌ** *may* belong to the same phoneme, though I do not regard it as proved.

However valuable for linguistic analysis, a system that writes the same symbol in stressed and unstressed positions in teaching that aims to enlighten the student on current cultivated pronunciation, tends directly to defeat one of the most necessary and difficult achievements—his understanding of vowel and consonant gradation in its bearing on normal cultivated speech. Every teacher knows that a major difficulty is to lead the student to realize that the vowel in the last syllable of *moment* is not phonically the same as in *mental.* A system of transcription that declares to his eye that they *are* the same creates the same obstacle to his understanding that is now found in the ordinary alphabet.

It is, of course, idle to claim that a phonic system accurately represents sounds. It does, however, serve to fix in the mind of the student distinctions and resemblances between sounds he is

already familiar with, and so serves further to point out to him variations and distinctions he had not before noticed.

I therefore continue for the present the use of the form of the IPA alphabet found in this book. It is the best form of the alphabet for American English that I have seen. It serves, with no serious variation in the phonic values of the symbols, to represent all the historical stages of English and all the dialects of American and British English with sufficient accuracy to give the student an intelligent view of them.

382. The transcription of rising and falling diphthongs. I prefer to write the rising diphthongs **wɑ, wi, jɑ, ji,** etc. (§328), with a consonant symbol+a vowel symbol; but the falling diphthongs with two vowel symbols, **aɪ, aʊ, ɔɪ,** etc. For the second part of **aɪ,** etc., is slower than the **w** and **j** in **wɑ, jɑ,** and the diphthongs **aɪ, aʊ, ɔɪ** I regard as one changing vowel throughout—the resonance feature predominates to the end. The initial elements of rising and the final elements of falling diphthongs are sometimes called consonantal vowels. But in my view the latter part of **aɪ, aʊ, ɔɪ** is a true vowel and the first part of **wɑ, jɑ,** etc., is a true consonant, both so apprehended by the users of English (see §71). A better term for the latter part of **aɪ** is nonsyllabic vowel (§327, end); but even that is inaccurate, for in a constantly gliding vowel just where does the nonsyllabic part begin? Hence it is thought better to write **aɪ, aʊ** than **aj, aw.** The same holds for the rising diphthongs **rɑ, re, ri,** etc.—a gliding consonant **r**+a vowel **ɑ, e, i,** and for the falling centering diphthongs **ɪə̯, ɑə̯, ɔə̯, ʊə̯,** etc.—a vowel+a nonsyllabic vowel. See *Centering Diphthongs,* §§352 ff.

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